

THE  
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& BUILDING NEWS

23 MARCH 1960

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NO. 12

ONE SHILLING WEEKLY

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- FURNITURE

PUBLISHED IN LONDON SINCE 1854

# Improved 'BRITON'

## Door Closer MK III

*The Inside Story* The "Briton" Door Closer is well known.

For years it has been the best in the World. Now, with the introduction of new features it is even better. Better because:

**Rubber "O" rings are used**

These are housed in a groove which creates an air chamber. This breaks capillary attraction and prevents oil from creeping up the spindle.

**Check regulator recessed**

This improves the appearance of the Closer, and removes all possibility of damage either before or after it is fitted to the door.

**Bearing lengthened**

This improves the stability and alignment of the spindle, and provides a seating for a new method of oil sealing.

**Adjustable arm covered**

This covering conceals the screw thread on the arm and improves the appearance of the Closer.

# 'BRITON'

DOOR CLOSER

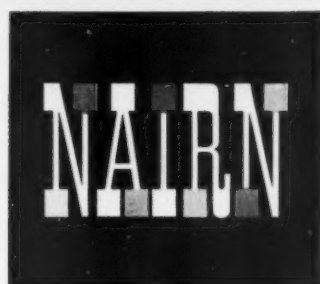
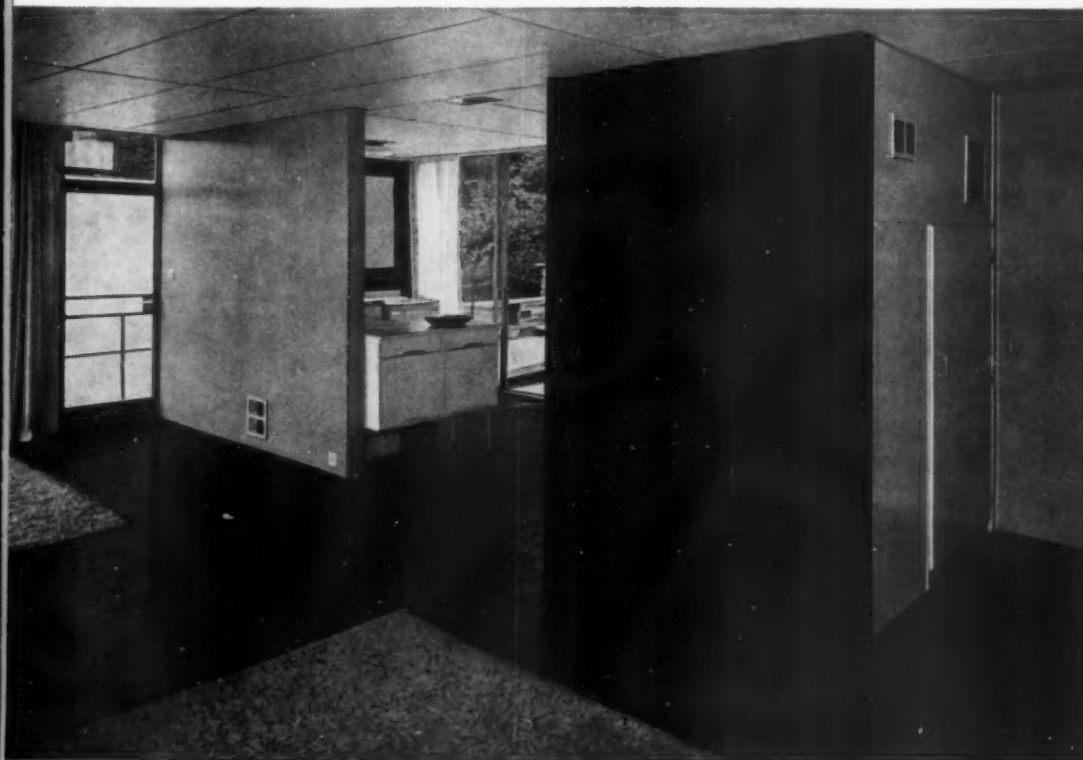
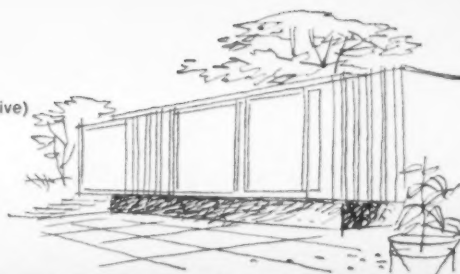
The prevention of draughts and banging doors is in your hands. Specify "Briton" and you eliminate both. It fits right and left hand doors without alteration, and the spring can be regulated to six different strengths by finger tip control. Doors are closed both smoothly and silently. When a "Briton" Door Closer is fitted it can be relied on. It is guaranteed for *ten years*!

# HOUSE AT BRANCH LANE, ALMONDBURY, YORKS,

featuring Nairn Vinyl tiles. Photo: Mann Bros. (Courtesy Peter Stead of Design Collaborative)

'... the first of a series of projects in which the designers are attempting to create living environments using colour-space considerations. The spaces, inside and outside, are determined by planes of colour... These coloured planes interact, giving continuous visual rhythms... creating a system of chromoplastic relationships and spaces that is clear-cut, yet tranquil.'

ARCHITECTURAL DESIGN, July 1959



# Vinyl tiles

**give you 19 planned colours to simplify colour-matched design**

Using Nairn Vinyl tiles, you can choose from planned colours. Virtually all correspond closely with B.S.2660, making it easy to design a floor that will fit in with the overall colour plan of your project. A marbled finish helps to maintain their appearance in heavy traffic areas. To satisfy a particularly big demand, plain black and plain white are available for use in the 2.0 mm range. The colour range shown here is based on the experience of our French factory, whose range has proved most popular with Continental designers. All 19 colours are available in the 2.0 mm domestic tiles (9" x 9"). In the heavy-duty 3.2 mm tiles (9" x 9" and 12" x 12"), there are 5 colours in the Contractors' Basic 'A' Range and a further 6 in the Architectural Design 'B' Range. Within each range, every tile is the same price: you can quickly and accurately cost up any installation.

## NAIRN TECHNICAL ADVISORY SERVICE

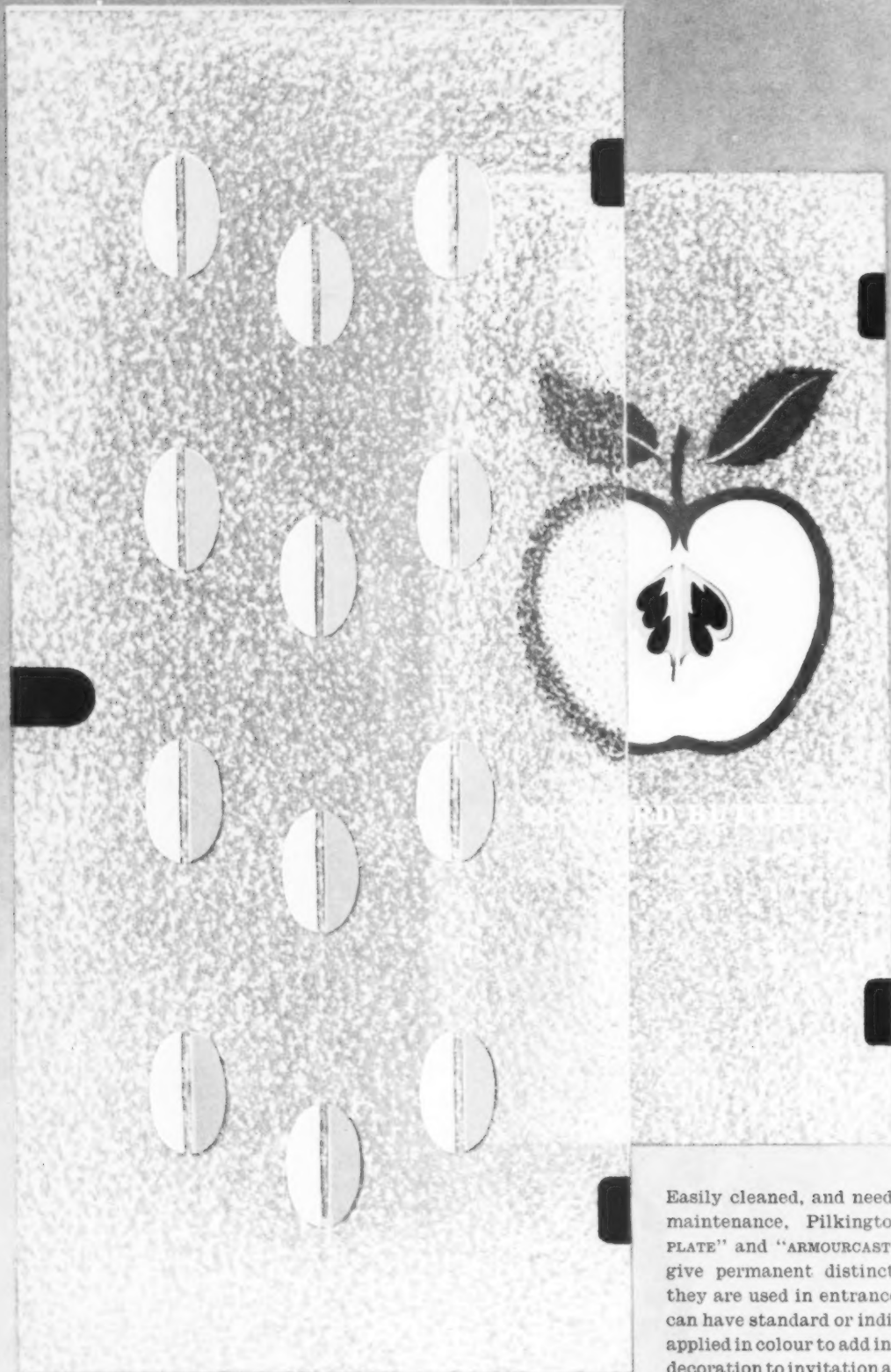
Technical representatives are based at our area offices to advise and give information on all matters concerning floorcovering materials. If you wish to consult one of these representatives, just write or 'phone any of these offices:

**MICHAEL NAIRN & CO. LTD., P.O. BOX 1**  
Kirkcaldy, Scotland. Kirkcaldy 2011 (10 lines)  
**LONDON EC1:** 131 Aldersgate Street.  
Monarch 3211 (8 lines).  
**BIRMINGHAM 2:** 65 Temple Row.  
Midland 5989 (2 lines).  
**BRISTOL 4:** 349 Bath Road, Bristol 77840.  
**MANCHESTER 1:** 4 Canal Street.  
Minshall Street. Central 1417 (3 lines).  
**GLASGOW CN:** 113 Centre Street.  
South 1011 (3 lines).  
**NEWCASTLE-ON-TYNE:** 41 Grainger Street.  
Newcastle 22807.

A complete range of 19 attractive colours for commercial and domestic use



designs to direct...



Easily cleaned, and needing negligible maintenance, Pilkingtons' "ARMOUR-PLATE" and "ARMOURCAST" Glass Doors give permanent distinction wherever they are used in entrances. Now, doors can have standard or individual designs applied in colour to add information and decoration to invitation and distinction.

Pilkingtons'

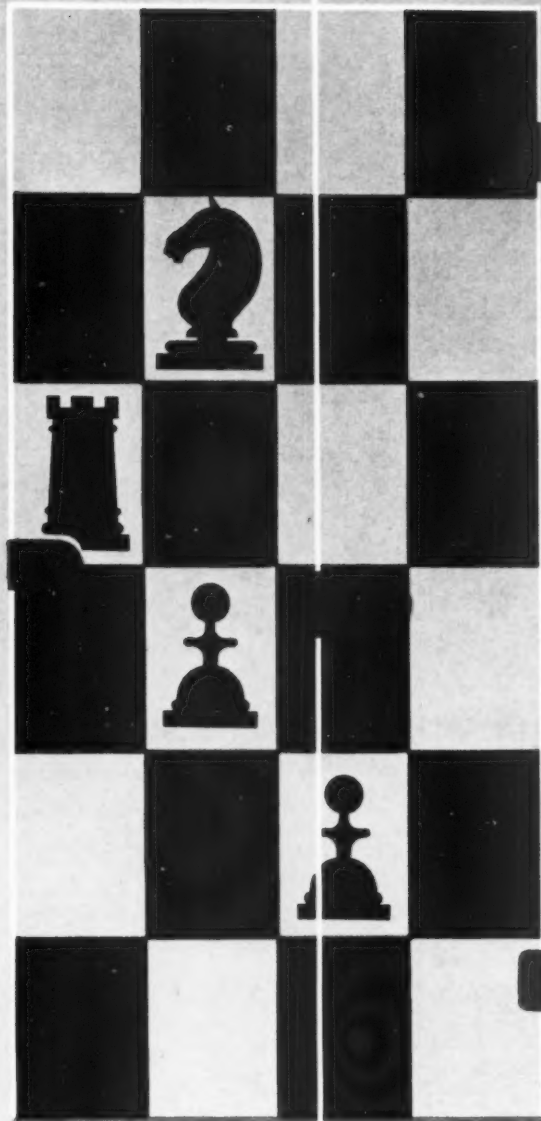
**"ARMOURCAST" Glass Doors'**



"ARMOURPLATE" AND "ARMOURCAST" ARE REGISTERED TRADE MARKS OF PILKINGTON BROTHERS LIMITED

# ...colour to invite

THE ARCHITECT and Building News, 23 March 1960

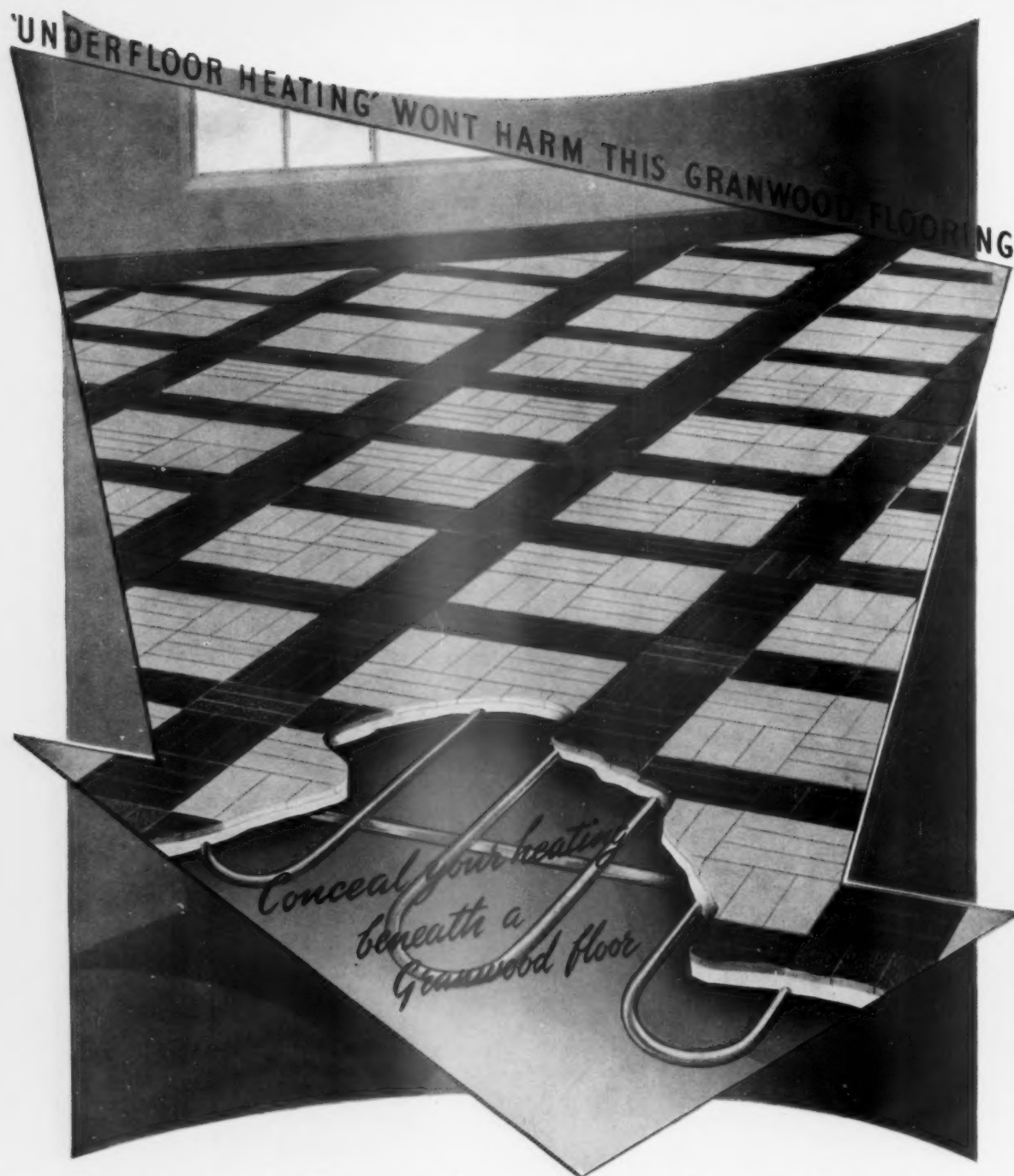


For full details of "ARMOURPLATE" and "ARMOURCAST" Glass Doors, and for information on the application of designs and patterns in colour, write to the manufacturers: Pilkington Brothers Limited, St. Helens, Lancashire (Tel: St. Helens 4001) or Selwyn House, Cleveland Row, St. James's, London, S.W.1 (Tel: WHITEhall 5672-6). Supplies are available through the usual trade channels.

## Pilkingtons' "ARMOURPLATE" Glass Doors

"ARMOURPLATE" AND "ARMOURCAST" GLASS DOORS ARE GUARANTEED FOR FIVE YEARS





## Granwood Floors for Under-Floor Heating

Granwood Composition block flooring is eminently suitable for use over all forms of under-floor heating and has been laid in this connection for well over thirty years with entire satisfaction. It has also been used extensively in conjunction with the now popular embedded electrical systems. As Granwood is laid direct in a cement and sand screed and becomes monolithic with the floor slab the problem of softening and deterioration of the adhesive due to heat does not arise.

A few TECHNICAL details of GRANWOOD FLOORING—the ideal floor covering medium:  
Specific heat 0.33: K value 2.2 B.t.u./sq. ft./hr./°F. Diff./1 in. thickness. Density 98 lbs./cu. ft.

Please write for illustrated leaflet.

Granwood Flooring Co. Ltd. is a member of the British Steel Constructions Group of Companies.

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*Two years intensive research went into its development.  
Its properties are unique. Its application revolutionary.  
The entire process of using laminated plastics can now be  
considerably extended and greatly simplified with . . .*

**FORMICA\***

# beautyboard\*



Essentially, FORMICA Beautyboard is a conventional FORMICA laminate, ready-veneered to a unique combination of special lightweight woods and backed with a laminate which needs no further finishing. It therefore offers a *complete* and ideal method of wall cladding — particularly for 'wet applications' or for applications where extremes of humidity exist: for example, centrally heated buildings.

**No uneven laminations** This is because FORMICA Beautyboard's unique properties remove for you the risk of Warping and Telegraphing.

**The surfacing and the surface.** Since FORMICA Beautyboard combines the decorative surfaces, the core and the balancing veneer it will simplify considerably many familiar applications. Wall cladding and partitioning with FORMICA decorative laminates are merely two examples.



*1/8" thick and available in the complete range, matt finish.*



**FORMICA—THE FINEST OF ALL THE DECORATIVE LAMINATES**

*For the complete details, write to — FORMICA Ltd. (Beautyboard enquiries) De La Rue House, 84-86 Regent St., London W.1. \*FORMICA is a regd. trademark*

designed for the modern planned interior

*A new conception in Lampholder design*

The NETTLE '1000' Range is designed to give the architect and interior designer a comprehensive selection of pendant and batten-type Lampholders in keeping with contemporary trends. These fittings, in white, black and dove-grey, are in accordance with the latest supplement to B.S. 52. They are, incidentally, highly competitive in price.

Selected by the Council of Industrial Design for display at the Design Centre. Prize winning exhibit at the 1959 A.S.E.E. Exhibition.

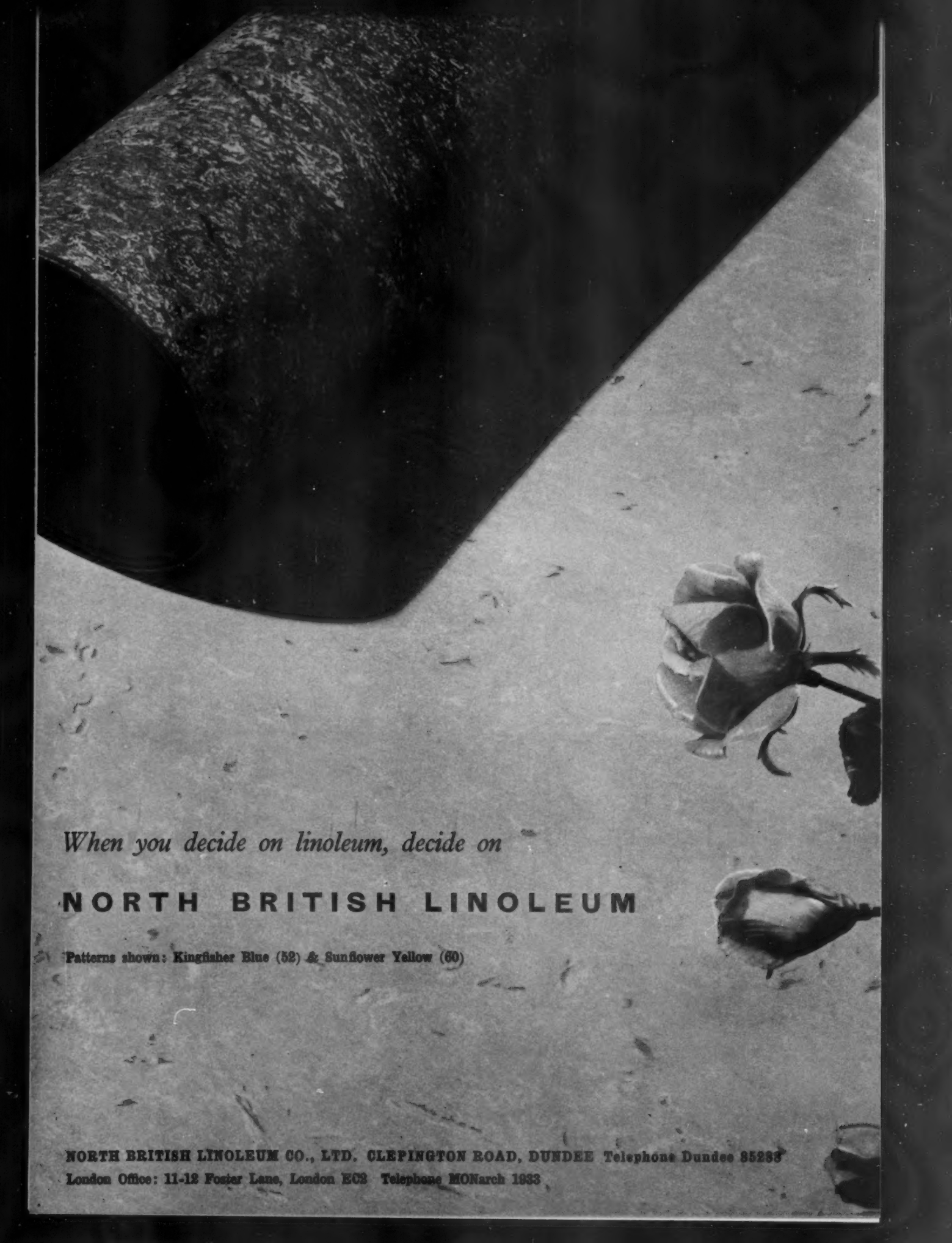
**NETTLE** 1000 Range

Regd. Design No. 888492-4

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**NORTH BRITISH LINOLEUM**

Patterns shown: Kingfisher Blue (52) & Sunflower Yellow (60)

**NORTH BRITISH LINOLEUM CO., LTD. CLEPINGTON ROAD, DUNDEE Telephone Dundee 35235**

**London Office: 11-12 Foster Lane, London EC2 Telephone MONarch 1933**



*"Vinylex tiles at the  
Shires Restaurant  
St. Pancras Station".*

Semtex, manufacturers of a wide range of flooring materials, including Semastatic Decorative Tiles, Semflex Tiles, Vinylex Tiles, Dunlop Rubber Flooring and Vertilex Decorative Wall Tiles, will employ their vast resources in taking welcome responsibility for your entire flooring operation. Twenty contracting branches throughout the country will advise readily on all flooring and pre-treatment problems and offer a highly-skilled laying service, providing, in addition, comprehensive facilities for design.

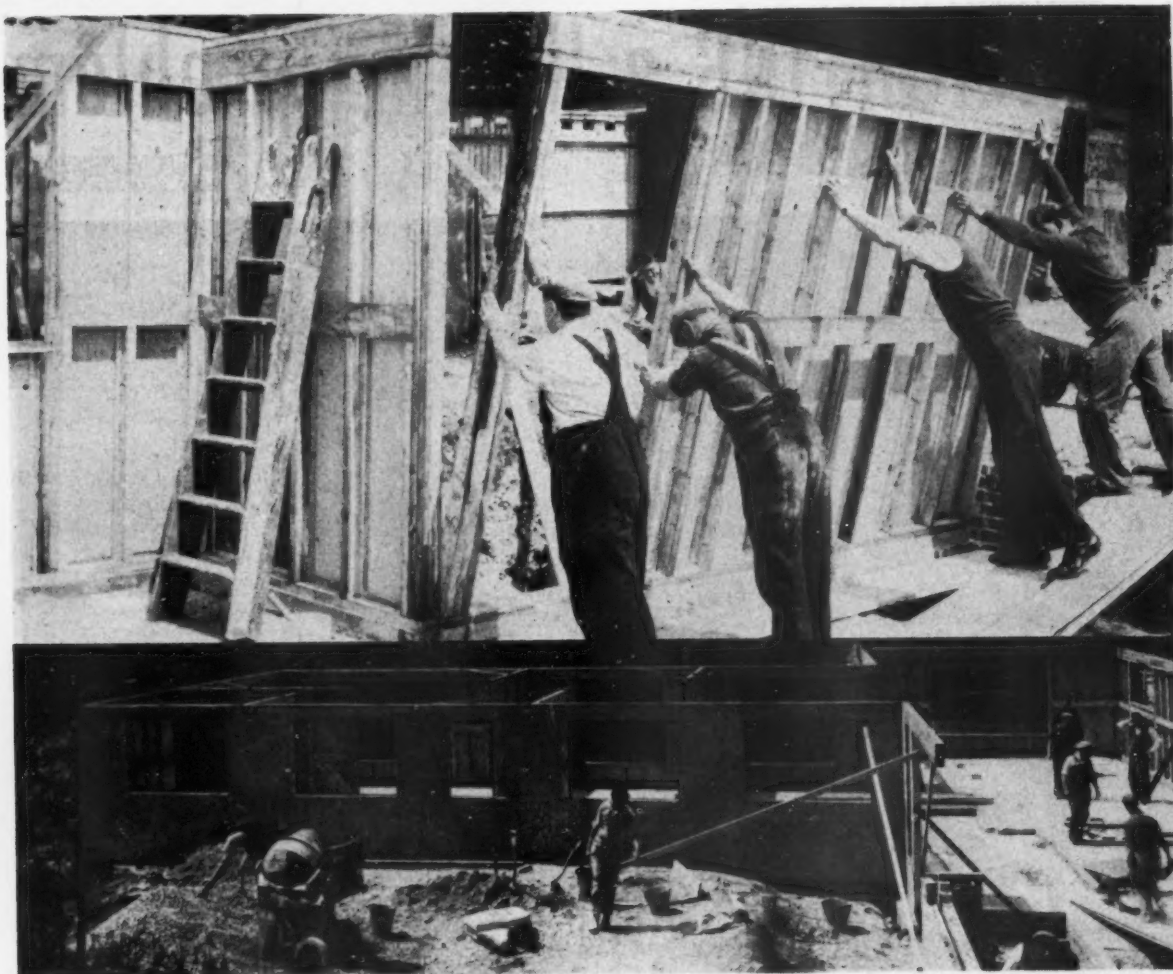
IMAGINATIVE MODERN FLOORING

**Semtex Ltd**

A DUNLOP COMPANY

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cm/60/55/c1



## Seaboard Fir Plywood *in Action!*

The walls of this modern Brighton home were pre-fabricated with Canadian fir plywood and erected in *one day*. Fir plywood sheathing not only speeded the job—it made this home permanently strong and rigid...

highly resistant to wind-wracking or settling. Big, split-proof panels of Seaboard fir plywood can do the work of heavier, more cumbersome materials. Perhaps they can save time—and money—for you too? Investigate today.

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London S.W. 1

Please send me free copy of Seaboard Plywood Handbook (L-11) describing your full selection of Douglas fir Plywood.

Name.....

Address.....

(Please print plainly)

UK-59-35-14



# SEABOARD

CANADIAN DOUGLAS FIR

## PLYWOOD

SEABOARD LUMBER SALES CO. LIMITED  
Seaboard House, Vancouver 1, Canada

# HIGHLIGHTING a lighting problem



Architects: Gollins, Melvin, Ward and Partners

## ...in the new library at Sheffield University

*L.E.F.* Raising and Lowering Gear was the answer to the problem of servicing modular lighting in this new library. Forty-six sets of *L.E.F.* Gear were installed, each operating a light fitting which had to be returned to its ceiling position with only an  $\frac{1}{8}$ " clearance all round!

Early consultation between *L.E.F.*, the Electrical Consultant and the Contractors, and close liaison throughout ensured the success of this installation.

LONDON ELECTRIC FIRM LTD. have solved many difficult problems involving maintenance of lighting in all types of building and in street systems throughout the country.

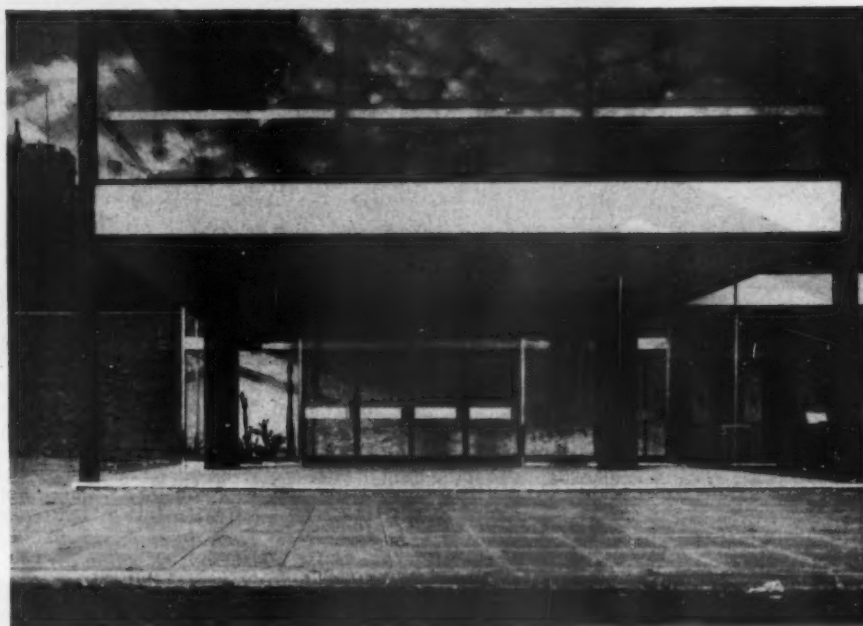
Discuss *your* problem with them, they will be glad to advise you.



LONDON ELECTRIC FIRM LTD. • Brighton Road • South Croydon • Surrey • Telephone: Uplands 4871.



## **aluminium window panels**



for the Sheffield University Library  
to the instructions of the Architects:  
Messrs. Gollins, Melvin, Ward and Partners

by **MELLOWES & CO. LTD**

**SHEFFIELD · LONDON · OLDHAM**



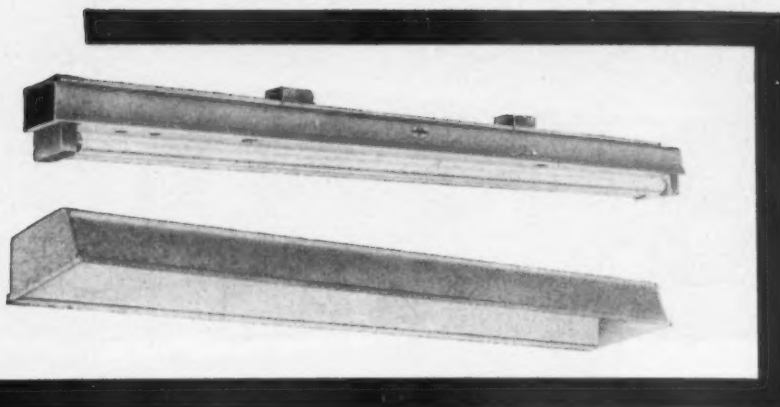
## Western red cedar

With a tree of great age (1,200 years is not unusual) a timber of enormous resilience may be taken for granted. Yet Western Red Cedar is also the lightest of all commercial softwoods and is unsurpassed in its easy workability. Free from pitch or resin, highly resistant to decay, acids and alkalis, handsome both in texture and colour—few timbers combine so many rare qualities, or provide a better material for so many different uses. Roof decking, exterior cladding, interior panelling, door and window framing, are just some examples. For further information contact the Commercial Secretary (Timber), Canada House, London SW1.



The Canada Trend House at the 1960 Ideal Home Exhibition

# can multi-use fluorescent units cut lighting costs?



The answer, to anyone who knows the **atlas atlantic** range, is immediately obvious. Such is the saving in time and labour with this system of pre-assembled fluorescent fittings, that economies can be effected all along the line from installation to maintenance. First big saving feature of **atlas atlantic** is the unique spring-loaded lampholder, which secures the tube all around the cap and allows one man to replace even an 8 ft. tube single-handed; and access to any part of the fitting or control gear can be obtained from one ladder position, without the need for tools or assistance. Whether **atlas atlantic** is fitted in an executive office, with one of the superb range of diffusers, or for a complete factory lighting installation using metal reflectors, the same straightforward servicing applies. Easy to install, fast to maintain, and supremely efficient in operation, **atlas atlantic** is available in sizes 8 ft., 5 ft. and 4 ft., with single or double tubes. And so, no matter how 'special' the job you can fit the right light without 'special' cost.



## atlas atlantic

flexibility in fluorescent lighting

Atlas Lighting Limited, Thorn House, Upper St. Martin's Lane, London, WC2



Y.M.C.A. Building Croydon. Architect: F. Starling. B.A. A.R.I.B.A.



## STELRADS...

for the good Samaritan

**WARMTH AND COMFORT** is the special recipe served up by much appreciated Y.M.C.A. hostels all over the world.

Helping this, the newest branch at Croydon, to cope with the demand is yet another Stelrad installation...

Stelrads, Britain's original, unequalled steel radiators, have a capacity for making friends and being at home in any kind of surroundings, for there is a suitable design and size for every need.

Full details of these fine radiators, together with specifications and illustrations, are contained in the Stelrad brochure. Please post us a card for your copy.

**STEEL RADIATORS  
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Sealocrete Double Strength Premix is a liquid formulated to impart many remarkable properties to concrete.

Incorporated in granolithic floor oilproof, waterproof, case toppings, produces dustproof, hardened surface.

Ideal for industrial purposes. Enables floors to be walked on 4-6 hours after they are laid.

Incorporated in mass concrete, gives increased crushing and tensile strengths, greater density and rapid hardens. Enables shuttering to be released in  $\frac{1}{3}$  the normal time.

Cement renderings are made waterproof, setting time is speeded up and adhesive properties improved.

Seals water leaks in concrete standing under pressure, enabling normal waterproof renderings to be applied.

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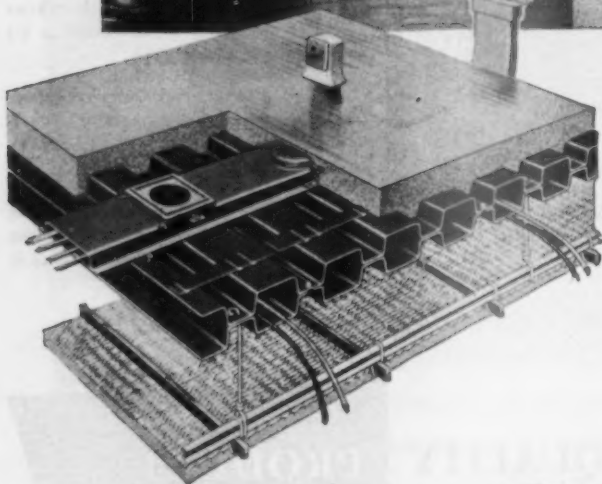
GRAMS AND CABLES: SEALOCRETE, WESPHONE, LONDON

# NEW COMPUTER STATION

for **Ruston Bucyrus Ltd.**



Construction Engineer: J. L. Pugh Esq. Messrs. Ruston Bucyrus Limited.  
Steelwork Contractor: Messrs. Joseph Parks & Son Limited.  
Main Contractor: Messrs. Thornhill Bros. Ltd., Lincoln.



Robertson Q-Floor is incorporated in the New Computer Building at the Works of Ruston Bucyrus Limited, Lincoln.

The installation, which houses some of the most modern data processing equipment available is designed to keep pace with the expanding activities of the Ruston Bucyrus Company. The choice of Q-Floor to facilitate the smooth running of the installation is a logical one.

Besides serving as a structural floor, Q-Floor provides, at a cost little more than the floor slab itself, a super-efficient network of electrical wiring ducts over the entire floor area. The system permits complete flexibility of partitions, desks and office machinery and enables new outlets to be installed at anytime with the minimum of trouble.

## ROBERTSON Q-FLOOR

The only British floor with an integral under-floor duct system.

# ROBERTSON Q-FLOOR

**ROBERTSON THAIN LIMITED**

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Telephone: Ellesmere Port 3622-9

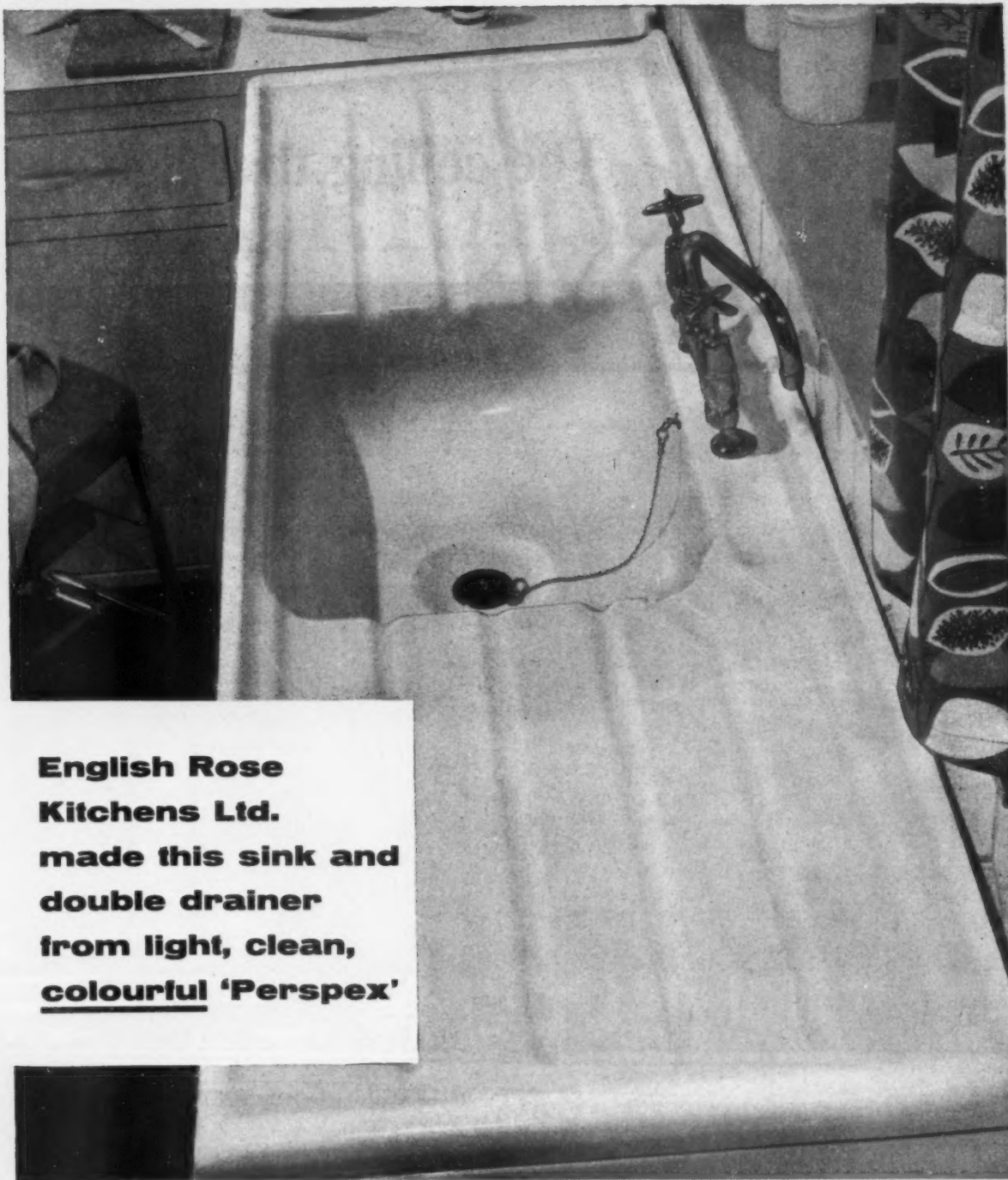
Telegrams: 'Robertroof'



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throughout the world



**English Rose  
Kitchens Ltd.  
made this sink and  
double drainer  
from light, clean,  
colourful 'Perspex'**

'Anemone' sink and double drainer made from 'Perspex' acrylic sheet by English Rose Kitchens Ltd., Warwick

ENGLISH Rose Kitchens Limited know that today's housewives want light, bright, colourful kitchen fittings. That is why they have made their 'Anemone' sink and double drainer from 'Perspex' acrylic sheet. Fittings made from 'Perspex' are ideal for kitchens old and new. They are gay modern fittings, and 'Perspex' offers a wide range of up-to-the-minute colours — colours that go

all through and are not just on the surface.

Sinks and drainers made from 'Perspex' will not rust, chip or corrode. They are light in weight. They are completely hygienic (one-piece moulding means no hidden germ traps). They are smooth, warm, easy to clean. They are quiet in use. 'Perspex' is not affected by boiling water, disinfectants, acids and household cleaning fluids.

No other sinks and drainers offer all the advantages of one made from 'Perspex' at such a low price.

Sinks and drainers are made from 'Perspex' by Arnoplast Ltd. ('Lustrelite'); Austin Waters & Son Ltd.; English Rose Kitchens Ltd. ('Anemone', 'Countryman'); Harold Moore & Son Ltd. ('Moorecraft'); Orbex Ltd. ('Orbit'); P. & S. Plastics Ltd. ('Everglos'); Shaw Glazed Brick Co. Ltd.; Troman Bros. Ltd. ('Crelene'); Thermo Plastics Ltd.; Wokingham Plastics Ltd.



7751

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**They made it from**

**• PERSPEX •**

'Perspex' is the registered trade mark for the acrylic sheet manufactured by I.C.I.

## The ceiling that lights

ARCHITECTS: Gollins, Melvin, Ward & Partners



### *A Lumenated Ceiling was chosen*

... for the Catalogue Hall, hub of the new Library of Sheffield University. This 3,714 sq. ft. light source will diffuse both daylight and artificial light without glare or shadows, giving even, efficient lighting throughout the entire hall.

## LUMENATED CEILINGS LIMITED

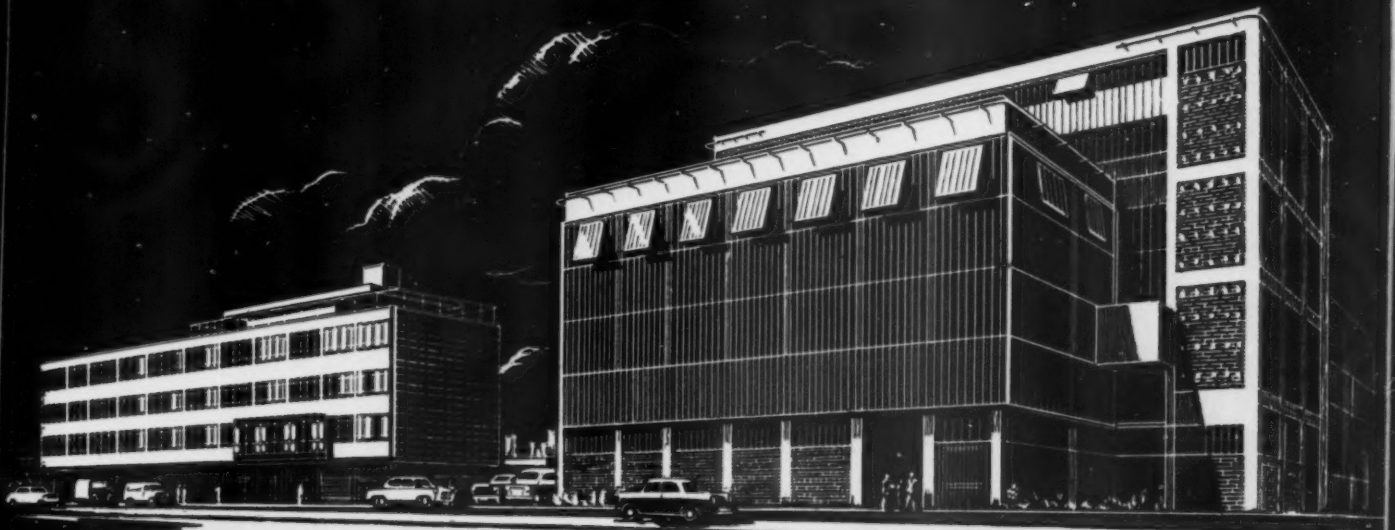
*A member of the Hall-Thermotank Group*

ALLIANCE HOUSE, CAXTON STREET, SW1  
Telephone: ABBEY 7113



# GERRARDS *of Swinton*

## EXPERIENCE COUNTS



*New Buildings at Bowaters Mersey Division, Ellesmere Port. Left: Administrative Block, Right: Groundwood Pulp Mill.  
Architects: Farmer & Dark*

**J. GERRARD & SONS LTD.**  
**SWINTON, MANCHESTER**  
AND AT LONDON & IPSWICH

*Building & Civil Engineering Contractors*

## A high density development for Leeds City Council

*Architect:*

The late R. A. H. Livett,  
O.B.E., A.R.I.B.A.,  
City Architect of Leeds.

*Contractor:*

F. Shepherd and Son Ltd., York.

FLATS—CROMWELL HEIGHTS,  
LINCOLN GREEN ESTATE, LEEDS.



## ... using 'Phorpres' Common and Facing Bricks

This multi-storey block of 50 flats at the Lincoln Green Estate, Leeds, is one of 11 similar blocks to be built on the 40 acre redevelopment area. 1,500 dwellings are scheduled to house 4,700 people. Other amenities—shops, garages, schools, clinic, club and public houses—are also planned.

In the completed construction 1,036,000 3" 'Phorpres' Dapple Lights, 148,000 'Phorpres' Commons and 9,000 'Phorpres' Slip Tiles will have been used.



**LONDON BRICK COMPANY LIMITED**—in the service of the Building Industry



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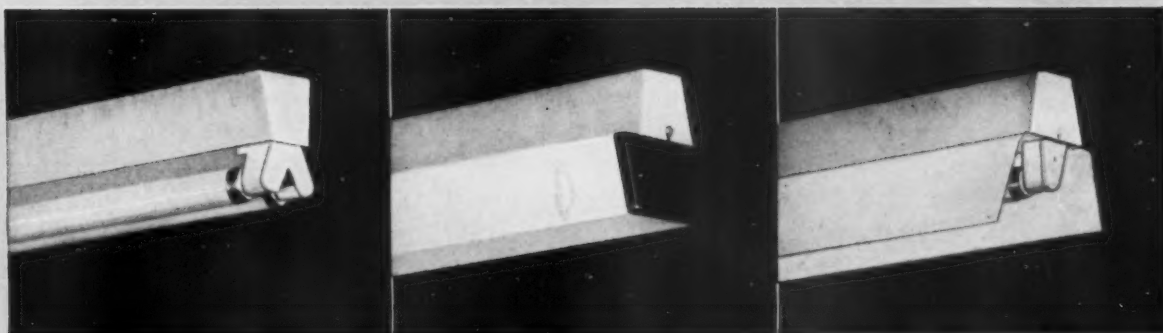


**a new range of inexpensive industrial  
and commercial fittings**

Here is G.E.C. reliability  
at budget prices.

This new Paragon range  
includes the popular  
Osram 1 x 80w pack  
at £4.19.8.

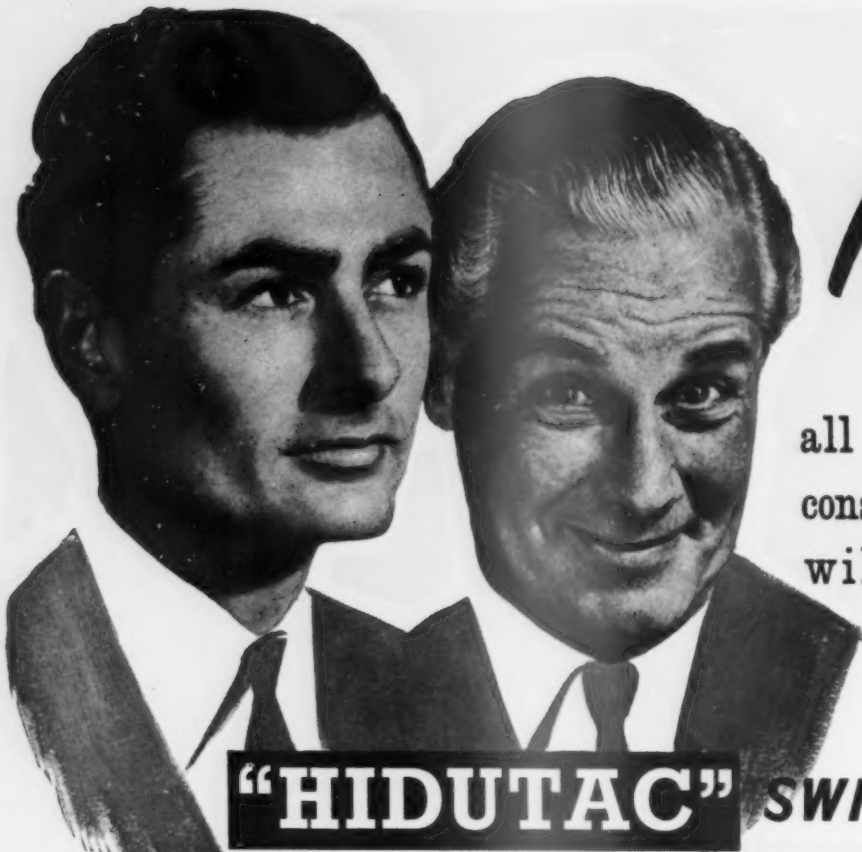
All patterns are  
cartoned complete  
with Osram guaranteed  
warm white tubes,  
and available one  
or two light.



# paragon

ECONOMY RANGE OF FLUORESCENT LIGHTING FITTINGS including the **Osram** 80W PACKS





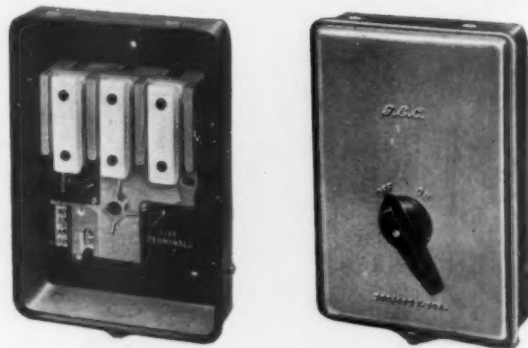
# NEW

all contractors and  
consulting engineers  
will want to use  
these **NEW**

## "HIDUTAC" SWITCHFUSES

SINGLE POLE AND NEUTRAL - DOUBLE POLE -  
TRIPLE POLE - TRIPLE POLE AND NEUTRAL

Men whose business it is to assess and advise are quick to appreciate the very real advantages offered by G.E.C.'s new Hidutac switchfuses. Unlimited full load switching. High breaking capacity. High fault current protection. Absolute safety. These are the performance features that the experts like so much, but they also welcome the smaller size and the good looks of this advanced range of switchfuses. As it is made by G.E.C., they naturally take its reliability for granted.



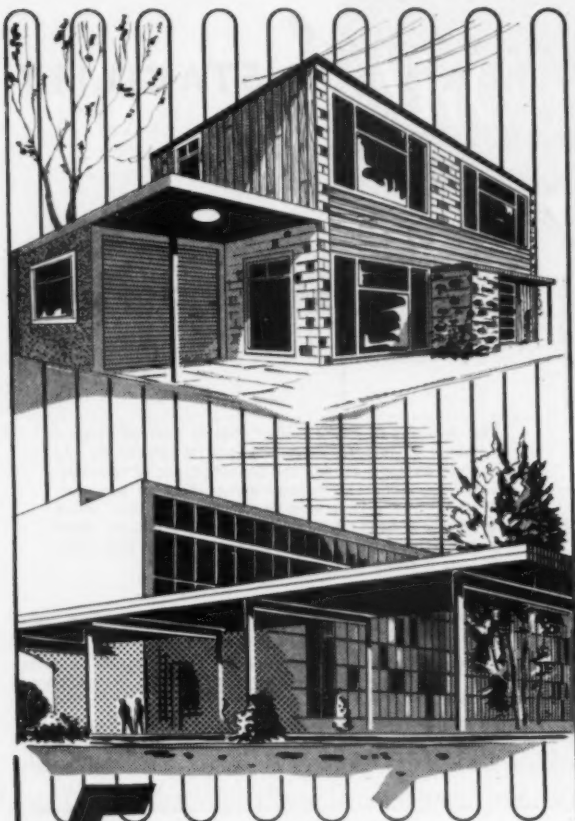
*15, 30 or 60 amp. 440 volt a.c. Single Pole and Neutral, Double Pole, Triple Pole, Triple Pole and Neutral Switchfuses with interchangeable H.R.C. or rewirable fuses.*



### INSTALLATION EQUIPMENT GROUP

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## LOOR - WARMING CABLES

*for* DOMESTIC AND INDUSTRIAL PURPOSES

AERIALITE "ASHATHERM" floor-warming cables give

fully reliable, solid embedded systems

for floors and roadways. The Aerialite

Floor-Warming Advisory and Technical

Service ensures that

YOU do a first-class floor-warming installation.

Monitoring sets are available to assist in laying and screeding.

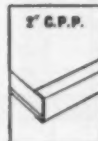
Send for full details to:  
Department F.W.I.,

# Aerialite

LIMITED.  
Castle Works, STALYBRIDGE, Cheshire  
Telephone: STALybridge 2223/8

CW 6735

## Seven symbols of progress



R.S.P.

Architects know that there is a mathematical relationship between span and effective depth of roof decking, and that there is an optimum "Natural Span" of the material. Any increase beyond this demands greater thickness, deadweight, cost of laying and, in many cases, expensive deflection-limiting devices. Thermacoust Roofing Slabs are produced in lengths not greater than the Natural Span, which is 7'0" in all cases except the lightest, where the limit is 8'0".

This orthodox approach has the sanction of experience. But what if the grid spacing is greater than the Natural Span?

The symbol R.S.P. indicates a simple answer to this problem: the new and exclusive range of Thermacoust Steel Purlins with span ranges of 8'0" to 11'0", 11'0" to 13'0" and 13'0" to 15'0".

Thermacoust roofing systems, the most sophisticated in the world, are firmly based on well tried orthodox practice.

Please write for full particulars.

*For purposes of illustration, the Thermacoust slabs shown in the picture have been cut down from standard slabs, and only one end of a purlin is shown.*

## THERMACOUST LTD

### ROOFING SLABS

20 ALBERT EMBANKMENT LONDON SE11

Telephone Enquiries (Southern)—London: RELiance 7281

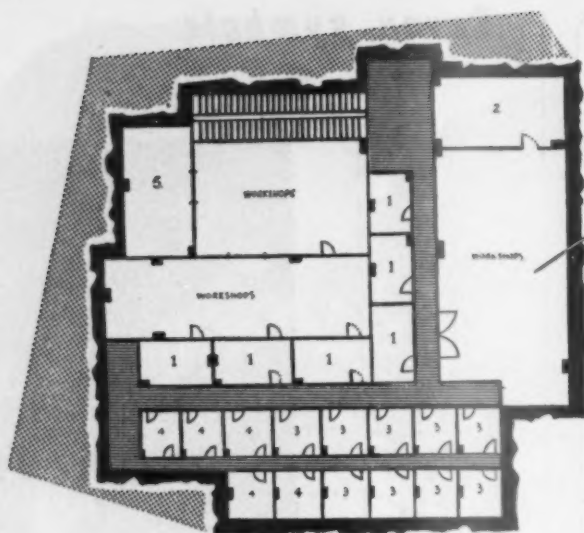
Telephone Enquiries (Northern)—Doncaster 54138 Ex. 25

When supported on inverted "T" or Thermacoust purlins no special fixing arrangements are required.

Flat-top purlins or R.S.J.'s call for Type 1 site fixing clips.

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## NO PISTOLS : COFFEE FOR TWO

MR. TRENCH'S brilliant paper, given at the R.I.B.A. last evening and fully reported elsewhere in this issue, is the broadest analysis of future trends in the building industry and certainly it is the most outspoken, as far as Portland Place is concerned, that we have been privileged to hear.

Peter Trench is widely respected on all sides of the industry, and it can be taken as a measure of his real concern about the well-being of the industry's future that he should make, within the architects' stronghold, this most stimulating and thoughtful statement since he took up office as the director of the builders' national organization.

His call for joint education of the building team and the reappraisal of the time-honoured training of operatives are the most urgent aspects of the important matters he discusses, and ones which the *Architect and Building News* has commented on in this column from time to time.

The danger is of course that "the desperately urgent need to re-examine first principles" in the training of operatives will not be accepted soon enough by the unions, and this would result in the progressive lowering of the standard of entry as other more farseeing industries offered greater opportunities to the better educated school-leavers.

There is no time to lose in initiating a scientific research project into this matter and of the two alternatives for implementing it suggested by Mr. Trench the Building Research Station might be preferable to a university.

On the much discussed topic of joint education, Mr. Trench goes further than anyone else to date. But perhaps he is not quite fair in saying "the R.I.B.A. more than any other body is to blame for not taking more realistic action in this sphere". It is scarcely to *blame*, in our opinion.

Six years of war, in which thoughts about architecture were on the whole destructive rather than constructive, have been followed by a decade of revolution in the size and outlook of, and in the demands on, the profession. All this has had to be assimilated, and time was needed. But there have been great changes at Portland Place and there can be no excuse, now that the gauntlet has been thrown down.

The R.I.B.A. council might well begin by approaching the other official bodies of the building team with the object of setting up a group of professionals, paid to investigate and report on the needs of joint education. A real start might then be made with the completion of Sir David Eccles' London College of Building.

## EVENTS AND COMMENTS

### NEW SIGHTS OF LONDON

The London County Council has put on a neat and interesting little exhibition at the Ceylon Tea Centre. It follows that staged at the Building Centre a year or two ago and shows L.C.C. and private enterprise schemes in hand or projected which will still further change the face of London. It is a "Brave New World" kind of exhibition supported by a half-crown booklet explaining what marvels the L.C.C. is doing. This booklet, like the exhibition, is intended for the layman (could it be the voter?). It contains a number of skilfully posed before-and-after shots showing the advantages of planned modern development over bombed sites and battered dustbins. The inference intended to be drawn is that children are so much happier in well-planned surroundings. This is the kind of thing that cannot be proved or disproved. My happiest memory is of playing in the excavated cellar of an uncompleted house, where I was not supposed to be. I admire the development work done by the L.C.C. tremendously, but I feel a little uncomfortable about the booklet.

The setting of the exhibition is good; you enter through imitation brick vaults and view many of the models through windows in them. Not all the models are to the same scale, and this requires some adjustment when fitting them into the general plan of London. The schemes for Marble Arch and Hyde Park Corner still seem to me to be pretty unsatisfactory. The creation of large islands surrounded by swirling traffic and only accessible by subway cannot be right, although alternatives are not easy to think of. The great model of the Barbican scheme in this setting really hits you. This is a touch, and a big touch too, of the fantastic. Let us hope that it goes ahead. In model the scheme looks tremendously complicated and one wonders how easy, or difficult, it will be to find the way from A to B. Models and drawings of other great schemes, including the very tall buildings soon to rise on Millbank, are shown. Generally speaking, only those which can be said to be contributions to the pleasant sights of London are shown. What about a developers' exhibition showing all the kite-flying speculative schemes that are on the drawing board?

### MODERN ARCHITECTURE AND THE BUILDING SOCIETIES

Speaking at the annual general meeting of the Abbey National Building Society, Mr. Stanley C. Ramsey, F.R.I.B.A., mentioned criticism of building societies generally for their attitude towards the design of houses on which they made advances. He quoted an important personage who had urged that building societies should give a positive lead in encouraging better designed houses and lay-out. In answer to this Mr. Ramsey pointed out that the Building Societies Association took part in the Central Panels Committee with the C.P.R.E., the R.I.B.A. and the I.O.B. The association was, he said, also represented on the House Builders' Registration Council. The chairman of the association was chairman of the council of the T. & C.P.A., to whose jubilee appeal the association had made a contribution of 500 guineas. Mr. Ramsey

hoped that these remarks might serve to demonstrate that building societies were aware of the public's interest in their attitude to questions of design. Later he said that as far as his own society was concerned he could confidently state that in his experience design and lay-out had never been so good. Modern estates were generally tastefully laid out, "and in this respect and in individual design the community's interests are increasingly considered and conserved," he said. There is very little, it seems to me, in all this to indicate that the attitude of building societies to modern architecture is changing for the better.

### CAR PARKING AT THE CIVILS

Last year the British Road Federation put on a large exhibition of motor roads in towns at the Institution of Civil Engineers. I wrote this up at the time as an awful warning, for it contained pictures of, among other things, the great monuments of traffic engineering in the United States. Last week, Mr. Marples opened a second and equally large exhibition, organized by the same people in the same place, this time of car parking. The exhibition is a tremendous mine of information on every kind of garage and automatic car park. Once again the feeling is that, compared with other countries, we have done next to nothing about covered car parking accommodation. I believe that only one major multi-storey car park has been built in London since the war. There has been a great deal of talk about others of every conceivable type, but nothing is done. Mr. Marples, in a very witty speech, gave at least one reason why this is so. At a peak parking period recently he had a report on the accommodation vacant in London's major garages. It was found that one-third of their space was empty. Obviously, no one is going to build garages which would not be used—they will not be used as long as people can leave their cars around in the streets. Mr. Marples said that the Government was determined to keep the streets free of parked cars and would introduce legislation soon. Perhaps when parked cars are hounded off the streets the developers will turn a more favourable eye to car filing cabinets. Walking round this very interesting exhibition I heard some optimistic claims for parking and unparking cars in the various types of automatic and semi-automatic silo on show. The most pessimistic time given by anyone for rush-hour conditions was ten minutes. This must be set against the gloomy stories from the States and elsewhere of breakdown and unparalleled jam. Some of the systems are certainly immensely complicated.

One eminent engineer I met thought that all motorists entering the Pink Zone should pay a special licence fee of £100 a year and that the money thus obtained should be used to build covered parking accommodation. He knew of a large garage built before the war at a cost of £120 per car which, even now, relies on sales of petrol to pay its way. Someone else told me that he knew of lock-up garages vacant in Kensington because people preferred to leave their cars in the street. He said that as many of the cars were owned by firms and were frequently replaced, no one minded much about deterioration. Mr. Marples admitted that before he was Minister of Transport he kept furniture in his garage and his car in the street, because parked cars prevented access to his garage whenever he wanted to use it. The exhibition remains open until March 26. An admirable guide, which also serves as a reference book, has been specially published for the occasion.

**ABNER**

## NEWS

### Public Inquiry into North Barbican Purchases

A public inquiry to hear objections to the Minister of Housing and Local Government confirming the compulsory acquisition, by the City Corporation, of land forming part of the Barbican scheme was held last week before Mr. A. R. Chown, the Minister's Inspector. The order was made on July 23, 1959.

Land involved comprises 3.145 acres in the North Barbican area, and as the inquiry proceeded it became clear that if the Minister confirmed this order the acquisition of the remainder of the land necessary to complete Chamberlin, Powell & Bon's comprehensive scheme of redevelopment may be expected.

It was on November 11, 1959, that the Barbican scheme was approved in principle, said Mr. F. H. B. Layfield, counsel representing the City of London Corporation. In the development plan land comprising the scheme was zoned commercial and the change in zoning to commercial/residential had been formally proposed jointly by the L.C.C. and the City, in an application to the Minister on March 3 this year. Mr. Layfield explained that in the area of land involved in the compulsory purchase order, some 0.56 acres were covered by roads; 0.02 acres by damaged or vacant buildings; 1.534 acres (about half the site) was cleared; 1.04 acres were buildings standing and occupied. There were, Mr. Layfield went on to explain, 143 interests in the area, of which 30 were freeholders, and 113 lessees and occupiers. This showed the importance of comprehensive redevelopment of such an area. The Corporation had already spent a lot of money on the scheme, in fact some £330,000.

### The Scheme

The Corporation thought it desirable, said Mr. Layfield, to acquire all land in the area to implement their scheme, work on which was expected to commence in the middle of 1961 and would take seven years to complete. It was the policy of the Corporation, wherever possible, to accommodate elsewhere in the City people who were dispossessed and they would not take possession of buildings until it was absolutely necessary. Murray House was the only building at present standing in the area of the compulsory purchase order which would remain in the final scheme after conversion into an hotel. Of the buildings in the area still standing none would be affected in the first year of building operations and only a few in the second year. Two of the objectors to the compulsory purchase order were the owners of public houses, but the Corporation were satisfied that they could find places for these two within the scheme. Another objection came from owners of a bank and this could also be included. A third objection came from the owners and lessees of a flatted factory.

### Alternative Scheme

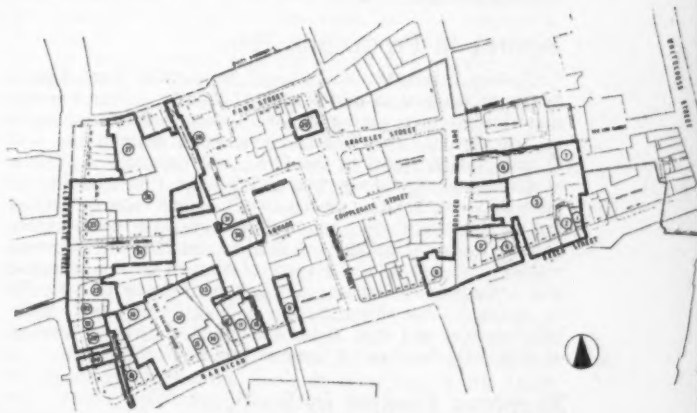
Mr. W. Scrivens, appearing for the interests of 96-100 Aldersgate Street (the flatted factory), produced a plan amending Mr. Chamberlin's scheme so that the factory could be retained. It was, he said, a modern building, finished, he thought, in 1938, and he thought it not beyond the bounds of possibility for it to be extended (as the lessees wished) and for the elevations to be dressed up to marry with Mr. Chamberlin's scheme. In cross-examination Mr. Chamberlin commented that this proposal had taken certain liberties with his firm's layout. (See elevation page 370.)

### Reconstruction of Euston Station

Engineering and architectural consultants have been appointed to advise the L.C.C.'s Town Planning Com-



Chamberlin, Powell & Bon's scheme for the Barbican site. The area above the arrows is North Barbican, the subject of the compulsory purchase order inquiry reported on this page. Below is a map of the area, with objectors' sites shown in heavy dotted line

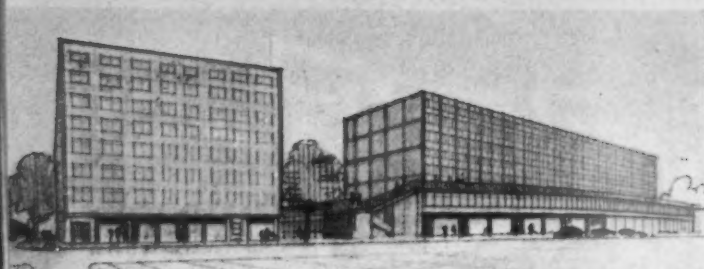


mittee regarding proposals involving the removal of the Great Hall in the scheme put forward by the British Transport Commission for the reconstruction of Euston Station. The Great Hall is on the statutory list of buildings of architectural and historic interest. The consultants are: J. E. G. Palmer, of Rendel, Palmer & Tritton; V. A. M. Robertson, of Sir William Halcrow & Partners; and Peter Shephard, of Bridgewater & Shephard.

Fees will be based on the scale fees of the Association of Consulting Engineers, and the total cost of the investigation is expected not to exceed £5,000, though the committee hopes that it may be less.

### Hyde Park Corner to Marble Arch Improvement

The Town Planning Committee of the L.C.C. have accepted the tender of Holland & Hannen and Cubitts (Gt. Britain) Ltd., Westminster, amounting to £3,000,069, for all the road and tunnelling work for this improvement. The tender was submitted jointly with Fitzpatrick & Son (Contractors) Ltd., Poplar, and Lehan, Mackenzie & Shand Ltd., Matlock, Derbyshire. The acceptance is subject to the formal approval of the Minister of Transport. Work is expected to begin on May 1, 1960, and will take 28 months to complete. The estimated total cost of the whole scheme is £5,380,000.



A scheme by F. M. Cashmore, F.R.I.B.A., produced at the Barbican inquiry to show how 96-100 Aldersgate Street could be extended to fit into the Barbican scheme

## Gorbals Redevelopment Approved

Glasgow Corporation has now approved Basil Spence's plan for the Gorbals redevelopment. Twenty-storey housing blocks will form the major "spine" of the scheme, which is the first of 29 such programmes planned for Glasgow. The blocks of multi-storey flats will dominate the new area and will be landscaped all round by gardens with shopping facilities, offices, public buildings, an assembly hall and similar facilities. The 400 houses will house 1,250 residents and will give access from three main staircase towers, each containing two lifts. The blocks will be all electric and will include underfloor heating in the living rooms. Each tower of twenty storeys will be raised on pilotis or stilts, giving public access below the buildings. Work will begin on this development during the coming summer.

## Siporex in Production Here

Costain Concrete Co. Ltd., of Newarthill, Lanarkshire, began production in mid-March of Siporex. This Swedish material has been used extensively for constructional work in Scandinavia, and Costain have been granted the sole manufacturing rights in the U.K. and Ireland. A church at Gracemount, Edinburgh, will be the first building to have Siporex in its construction. Other uses proposed are at Cumbernauld, on multi-storey flats at Glasgow and on technical colleges at Paisley and Dundee. Costain will have an initial labour force of 50 men on this material and anticipate expansion of this labour force to 500. It is claimed that Siporex is as light as wood, non-inflammable, and that it can be nailed, cut, sawn, drilled or otherwise handled by normal building tools.

## Shopping Centres in Scotland

The first shopping centre in Glasgow to be undertaken by private finance will be at Drumchapel, where Leslie & Co. Ltd. are to build a 100 shop and store landscape centre to serve this 40,000 population suburb of the city. Work will begin in April and will be completed within 18 months. Maximum scope will be given for undercover shopping. Leslie & Co. are also building a new shopping centre at Mastrick, Aberdeen, involving 21 shops and a chain store, again on precinct lines, with pedestrian courts and landscape surroundings. This centre is being built for Arnlae (Scotland) Ltd. and work is to begin soon on this project. The same contractors have received instructions from House of Fraser for the new four-storey departmental store which will stretch from St. Enoch Square, along Argyle Street and down Jamaica Street. Demolition work is proceeding and construction will start thereafter.

## New Chairman, Cockade Ltd.

Sir Gordon Russell, who recently retired from the directorship of the Council of Industrial Design, is to join the board of Cockade Ltd., as chairman, next month.

## Roxburgh County Buildings Competition

Roxburgh County Council has announced its intention to hold a competition for the design of their new county

buildings at Newton St. Boswells. Premiums will be 500gn, 300gn and 200gn. More information will be available in a later issue.

## Travel Grant to Brazil

A travel grant, or grants, from the trustees of the Leverhulme Foundation has been offered to British architects to enable the holder to work for a period of at least a year on the planning or building of the new federal capital of Brazil. Applications are also invited from students who have passed the R.I.B.A. Final Examination, Parts 1 and 2 (or have been exempted from them) and who have at least two years' practical experience.

Applicants, between the ages of 21 and 35, should be keen to visit Brazil, and able to spend a minimum of twelve months there in travel, study and practical work. They will work in the planning office at Rio de Janeiro (under the direction of Lucio Costa) or the site office at Brasilia (under the direction of Oscar Niemeyer), or both.

A normal salary will be paid in Brazilian cruzeiros, but as salary scales in Brazil for work of this kind are comparatively low, awards of approximately £1,000 are being offered to supplement this salary and to allow for additional travel expenses as well. Married applicants are not barred; but the award is not intended to cover the total expenses of two people.

Although a few officers of NOVACAP (the New Town Corporation) can speak English, the holder of the award will have to acquire a rough working knowledge of Brazilian Portuguese in order to make his way round the office and understand drawings, notices, etc.

In order to be considered for this award, applicants should write a letter, in type or manuscript, to the secretary, Royal Institute of British Architects, 66 Portland Place, London, W.1, to reach him on or before March 28, 1960, marking the envelope, Leverhulme Travel Grant.

In this letter the applicant should state: (a) why he is particularly interested in going to Brazil and working on the plans or designs for the federal capital. (A short paragraph will suffice, and it should not in any case be longer than two hundred words.)

(b) His age, qualifications, experience and special interests.

(c) Brief particulars of any prizes or other awards gained; the title of any thesis he has produced, writings he has published; or buildings he has designed.

(d) His willingness to travel to Brazil as soon as possible after April 30, 1960, and not later than the end of October, 1960.

(e) The names of three referees from whom inquiries could be made about the applicant's character and professional abilities, one of whom should *not* be an architect.

Parking garage, "Grottenau", Augsburg, Germany, on show at the "Car Park" Exhibition. See Abner's note



## LOOKING AHEAD AT THE BUILDING INDUSTRY

This article is a full report of the important paper presented to the R.I.B.A. yesterday by PETER TRENCH, O.B.E., T.D., B.S.C., F.I.O.B., the director of the National Federation of Building Trades Employers

IT would be ridiculous to believe that the future structure of the building industry will not be influenced by matters quite outside the control of the industry itself, and it would be just as ridiculous to believe that these external forces are at all predictable with any accuracy.

The "future" itself needs defining, for tomorrow is the future and so is the Millennium: in fact I am confining myself to some 50 years. I do this for two reasons. First, because it is a useful cycle of time over which trends may be established and secondly, unless some quite extraordinary medical development takes place, it is extremely unlikely that in 50 years' time I shall be here to be proved wrong!

The influence of political economy more than anything else is likely to shape the building industry of the future, and if I seem to take up a great deal of time on this it is only because I believe that that this influence, together possibly with a change in education philosophy, rather than design, technical, trade union or any other influence, is likely to be the greatest factor contributing to our industrial evolution during the next half century.

### Economic Considerations

"*Ceteris paribus*"—a Roman economist's phrase meaning "Don't tie me down to this, old boy"—*ceteris paribus*, it would seem that there are two reasonably basic assumptions for the future. First, that our population is likely to increase out of proportion to our natural resources, and, secondly, that our rate of expansion is likely to be dependent on our ability to sell—not here—but abroad. On a further assumption that despite the very real likelihood of being able to choose the sex of our future generations there is little likelihood of producing a number of supermen, then our future prosperity depends on better education and training in the broadest sense on the one hand, and technical advances on the other.

One thing is quite certain from these assumptions, viz. that our resources will never be really adequate to afford the luxury of waste, whether it be manpower, raw materials or brains. Nor in the years to come will we be able to stand aloof in our island fastness, basing our independence on the glories of Empire. With the rise to top world status of China over the next 50 years, with Russia looking quizzically over her shoulder and the U.S.A. busy courting her northern and southern neighbours; with all of them watching keenly and vying for the development of the under-developed, a tremendous amount will depend on the unification and economic and political stability of Europe. And as sure as eggs are eggs we will not be able to contract out of our European responsibilities.

The somewhat disparaging description of the building industry as a "sheltered industry" is unlikely to apply by the end of this century. If the building owner in 50 years time will be able to get a better building from a German architect-cum-engineer, or even from a German building firm, patriotism is unlikely to prevent him from doing so.

### Political Considerations

Politics, of course, cannot be excluded from these considerations. During the 50's the world, including Russia, swung politically to the right. What of the political future? If we were to assume a check, and even a long term reversal of present trends so that the pendulum swung back to the left, then we might envisage the building industry split down the middle, with the majority of work carried out by public or local authorities, perhaps

by means of their own direct labour organizations, leaving a minority residue carried out by private enterprise and a dwindling number of larger contractors. This, however, I believe to be a false political assumption, and only if we fail economically will we be faced with a structure such as this. A rising standard of living, full employment, coupled with an educational and training revolution which I believe we shall see during the next 50 years, will favour the right and centre parties, and although all political thought is likely to be progressive in the sense that all political parties will accept a high minimum standard of social responsibility, I do not think we are likely to see the advent here of a true Socialist State. A probable lessening of international tensions with the resulting economic impact of disarmament gives added strength to this assumption.

### The Industrialization of Building

Few industries have achieved their end product in conditions so conducive to waste as building: some of those conditions are of its own making, but others are the result of working in the open with a constantly changing labour force. It has been estimated, for example, that the loss of output each year from bad weather alone is equivalent to a permanent loss to the industry of a labour force of 50,000. Many of the traditional building processes are wasteful in the extreme. Inefficiency and poor production are two more factors which contribute to waste. The country cannot afford this waste now and, as I have tried to emphasize earlier, it will certainly not be able to afford it in the years to come. The antidotes are already emerging—better training, increased managerial skill, mechanization and prefabrication or off-site preparation—they are being forced on us by the external influence of economics, and the trend will continue.

The trend towards the industrialization of building, made inevitable by high site costs and low output, will in itself give full scope to the increasing use of new management techniques, such as planning, work study and incentive schemes, for these are more capable of fulfilment in the factory conditions of pre-assembly and the mechanized site than they are with today's building processes. It has been computed that 40,000 concrete mixers are in use on sites at any one time and in many cases turning out concrete for placing in formwork fabricated under site conditions. It is well worth considering the saving in men and materials (although not necessarily in money) by the use of ready mixed concrete, scientifically mixed and controlled at a central depot and poured into formwork prepared off-site, or alternatively, the use of pre-cast and possibly prestressed concrete units fabricated under factory conditions. Such trends towards the reduction of waste in men and materials cannot be sustained, however, unless the relative costs are favourable and designers and erectors are themselves prepared to experiment in this direction. We have only recently arrived at a stage where the cost of site labour on a normal building job has made large scale mechanization an economic proposition, not only because it has led to a reduction in overall costs, but because the whole building process has been speeded up, with the indirect savings that go with getting a building into production at the earliest possible moment. The growing understanding of the economics of fast building will, no doubt, contribute directly to the trend towards industrialization.

I foresee, therefore, a larger volume of work being carried out by a smaller site labour force, mechanized and competently directed, and using a small number of prepared components. In case this should be misinter-

## LOOKING AHEAD AT THE BUILDING INDUSTRY

preted as a forecast of redundancy let me make it clear that I see no reason to believe that the total manpower servicing the industry will be altered, but its distribution and emphasis will change and its volume of output will increase. Such a glittering future has some very important pre-requisites, however! Better education and training in every department is one.

### General Education and Training

It is not known, of course, how much of the Crowther Report will be adopted, or when, but over the next half-century certain main principles are likely to be established. First, the school leaving age will be progressively increased. Secondly, some form of post-school education and training will become obligatory, and thirdly, the status of the teaching profession itself is likely to receive the recognition which is its due. The sum total of this must be that those entering the professions, industry and commerce will be better educated than in the past, and as such their choice of careers will be influenced by the opportunities open to them by those competing for their services.

### Management Recruitment

To their credit, some progressive thinking builders have become aware of this fact and, anyhow on the management side, are setting their sights at new levels both in attracting and training recruits. In consequence, although everything in the garden is by no means lovely, I have little doubt that on the production side of the industry there is likely to be a rapid increase in managerial efficiency (and here I include site supervision) and with the recently revised examination syllabus of the Institute of Builders the first steps have already been taken to secure the future.

### Recruitment of Operatives

But what of the recruitment, education and training of those members of the industry, now numbering over a million, who carry out the work on building sites? Here I am anything but happy about the future. I believe there is a desperately urgent need to re-examine first principles. First, concerning the attractiveness of the industry and, secondly, concerning the training of those entering it. I will say no more about attraction than that this is not merely a question of financial reward, it concerns working conditions, ladders of promotion, reward for merit, and a tremendous job of public relations. This is a paper in itself, but I am concerned that if we are unable to raise the status of the whole industry in the eyes of the general public, the changes that many of us would like to see will be very slow in coming about.

On the training of our operatives I would say this. We have accepted the craft principle for a thousand years and more, we have accepted the sole division of craftsmen and labourer, we have accepted that the training of a bricklayer and the training of a painter require similar periods of time. We have accepted the unscalable barriers between the crafts. We have accepted many other principles—without question. I suggest that the time has come to question those principles and to look at the real requirements of the next 50 years. What skills will we need to carry out new work and maintain the old? How much time can be afforded to train young men in building circular Elizabethan chimney breasts and rubbed brick arches? Is there a need for a multi-skilled operative? What of those men whose manual dexterity or craft skill is less than the so-called craftsman but who is responsible for an expensive machine and whose contribution to the financial success of a job is greater? These questions must be answered, and the sooner the better. How can this be done? First, there must be a reassessment of user requirement, or in other words, an industrial job evaluation to establish the

varying skills and degree of skill and responsibility required by the building industry of the future: secondly, training programmes must be devised to cater for these skills, and lastly, the barriers of demarcation must be broken down. This is probably one of the most difficult problems facing the industry, and in particular the trade union movement. It must be met with courage if we are to compete for our fair share of manpower and make our rightful contribution to the national economic well-being. It requires in the first place an agreement by employers and unions that a scientific research project should be initiated by one of the universities or the Building Research Station—probably requiring several years for completion—so that the true requirements of the industry may be established.

If, and only if this is accomplished, will we see the base of our industrial triangle firmly established. For, as I have already said, over the next 50 years the true pattern of the industry should be a smaller but better trained and a better paid labour force, organized by more efficient management, carrying out a greater volume of work than now. Only in this way can this tremendous industry play the part demanded of it in the economy of the future.

### Size and Scope of Building Firms

What of building firms themselves? Recent trends have shown a reduction of the overall number of building firms and an increase in the larger units. This is not surprising since the industry has been sorting itself out from its post-war mushroom growth. But will it continue? I find my crystal ball a little hazy on this, and any answer must be hedged around with "ifs". If we proceed in a series of minor financial crises interspersed with boom conditions, and this I believe to be very possible, for although we have learned how to avoid the long pre-war trade cycles we have not learned how to achieve stability, then I fear for the medium-size building company. Unless such a company can put aside sufficient in the bright times to tide it over the not-so-bright, I think it will see its bread and butter taken from it in times of recession by the larger firm coming into its area and zone of influence. This larger firm, more and more with its own cheap and efficient patented construction system prepared off-site will, in times of stress, break into that part of the market which normally it would not wish to touch. Unhappily for them, the medium firms are not always able to take one step down and break into the jobbing and maintenance market, for here, not only will their overheads and organization not allow them to compete economically, but the small local jobbing builder is firmly and often unshakeably ensconced. The advantage that the small local man has over others is not always realized. Such advantages include a comparatively low overhead, and a small but permanent labour force often unbedevilled by such complexities as demarcation and special rates. In building, the builder goes to the job—the job cannot be brought to him so, like garages and filling stations, geography and convenience play a big part in keeping a number of small firms in existence. It must be remembered, too, that in the latest figures of the total of £2,200 million of construction work, £460 million was in repair and maintenance, a proportion which must be kept in mind when talking of new skills and the future. There is no reason to believe that this proportion is likely to reduce, nor is there any reason to believe that the structure of that part of the industry responsible for it is likely to show any revolutionary changes.

Again certain other "ifs" over the next half century could see the advent of the large regional builder as opposed to the London national contractor. For this, much depends on the willing mobility of labour, communications and the whole spread of urbanization, but it is not impossible, on economic grounds alone, to envisage a regional (50 mile radius) concentration with a more stable, mechanized, and technically equipped labour force. The alternatives to this are the growth of the large regional subcontractors or, what is more likely, the

taking over by national contractors of strategically placed medium size firms on a regional basis.

The structure within firms has altered quite considerably in the post-war years. The employment of design staff is not new, but there is every reason to believe that this practice has grown of late. I have little hesitation in saying that in the years to come architects with the necessary qualifications will take their place alongside engineers on the boards of building companies. Moreover, this move should be welcome for at least two reasons. First, I anticipate that a limited number of building owners will continue to deal direct with building companies and this in itself justifies top level representation of men trained in design; men who round the boardroom table can influence colleagues concerned mainly with production. Secondly, with the continuing trend towards negotiated contracts the extent of the contribution that a builder can make at the design stage is commensurate with the calibre and training of his staff. Here again I consider the future architect has a role to play at board level.

## The Contract System

Let me now launch straight into the anathema and dilemma of architects, the packaged contract. Frankly, this has emerged for two simple reasons. First, the builder has found that he has a less frustrating and more profitable life under this system of contract, for by controlling design and construction and the flow of information required for production he is enabled to function more efficiently, thereby facilitating an adequate profit and, secondly, for sheer speed from conception to completion, some building owners are persuaded that this is a better method than the generally accepted one of competitive tender. I might add that, heretical as it may sound, to many building owners the fact that the building may suffer aesthetically is of no great importance provided it functions well, and moreover the fact that by spurning competition theoretically he might pay a bit over the odds does not matter to him provided the finishing price is within his budget and he gets his building on time—two phenomena generally capable of fulfilment by a competent building firm given full control of the project.

The dilemma, of course, is that in insisting on a competitive tender system which is frustrating and unprofitable to the builder, the architect has put a noose round his own neck, for he has driven builders, anyhow the larger ones, into producing more remunerative and less frustrating ways of doing work. He has done this without being able to find a competitive alternative where the interests of all parties coincide.

The packaged deal, the consortia of architect, quantity surveyor and builder, the negotiated contract will all have their place in the future, as will, no doubt, the growing civil engineering trend towards competition on a basis of design and erect. Two factors may well influence these trends: first joint education, about which I shall say something pretty pungent in a minute and, secondly, budgetary control, by which I mean the possibility not only of planning a building within given limits of expenditure, but the capacity to control building costs so that the limits are not exceeded.

The degree to which contracts are carried out by these means will depend on the competence of the independent architect on the one hand and the real, not fictitious, contribution which a builder can make if brought in at the design stage on the other. I do not wish to be side-tracked on the question of professionalism and in particular the professional builder, but I am inclined to believe that with better education and a higher calibre of entry into building firms the need for independent watchdogs of high moral standing is likely to decrease rather than increase.

It would be foolish to think, however, that we are likely to see the demise of the competitive tendering system. After all, the local authority and publicly employed architect, even if he does so against his better judgment, is generally forced to go out to competition. He is

sitting fairly firmly in the saddle, both now and in the future: no packaged deal for him and no noose round his neck, and is he not responsible for a large proportion of the building work of the country? His lords and masters will, by tradition, statute and regulation continue in many cases to force him to put numbers of builders into competition. The glimmer of hope here is the growing official realization at Treasury level of the need for long-term budgeting and financial allocation for building programmes: with such a state of affairs it will be possible for public and local authorities really to provide documentation to a limited number of tenderers in such a way that sane and intelligent pricing will result, the estimator knowing that the chance of extras will be few, if any. Estimating itself, influenced by the growing collection of work values and feed-back of costs will assuredly become more scientific in the years to come. Alas, scientific estimating based on historical costs in itself does not ensure obtaining the contract, in fact it might result in never obtaining a contract at all, and the man who goes in at less than cost, will no doubt, live to fight another day. His days, I submit, are however, strictly limited by the competence of the architectural profession itself.

## The Quantity Surveyor

Time precludes me from making more than a passing reference to the surveyor (or for that matter the consultant) but he himself must feel that he has played himself into a permanent place in the first eleven. As to the future, here I would only comment that in my opinion the emphasis in quantity surveyors' offices may well change from bills of quantities to cost consultancy.

## The Role of the Architect

As for the structure of the architectural profession this is a very different matter. Unlike some people, I am fairly convinced of two things, first that the problems confronting the architectural profession are rivalled in their complexity only by those confronting the trade unions, and secondly that a scientific analysis of these problems and a bold decision to shape long term policy is of vital importance, not only to the profession itself, but to the well being of the industry as a whole. Having said that I will add that what I have heard of the Oxford Conference, and subsequent evidence, the R.I.B.A. is fully aware of its responsibility in this matter.

Here I must refer to that thought provoking paper of Mr. W. A. Allen, "The Profession in Contemporary Society", given here on March 8. I go with him much of the way, but at one point our paths diverge to some extent—it is when he starts to develop this thesis on the architectural profession itself. "It seems to me", he says, "that our greatest difficulties spring from the fact that we have to be at once artists, planners, technologists and men of business . . ." He continues a little later: "It is occasionally said that we try to encompass too much, but to concede this would be to accept that the practice of architecture itself has become impracticable." He denies that this is so, provided that the quality of entrant and his training is sufficiently high. I beg to differ with my good friend Bill Allen, anyhow, on a matter of degree. The practice of architecture in his context and as it is envisaged today, if it has not already become so, will shortly become impracticable of achievement. If the architect of the future attempts all the functions at present attributed to him, great architecture and efficient building will be a matter of luck. In hushed tones, therefore, I say the architectural profession is trying to do too much in its eagerness to retain its leadership. It is, in fact, taking upon itself responsibilities which do not rightly belong to it in modern times, and its future to my mind depends on its shedding some rather than attracting more. There are but few who can combine the qualities of artist and leader, or the qualities of artist and business man; there are many who can combine the qualities of artist and technologist; there are indeed large architectural partnerships where all these qualities are to be found

## LOOKING AHEAD AT THE BUILDING INDUSTRY

among the partners combined, but what hope has the individual of assimilating the knowledge and gaining the experience at present demanded for six per cent. What is then required of the average architect in an industrialized building industry? Above all he must be a technologist and on the design side he must be as intimately concerned with the design of the component parts that go to make the building, as in the building itself, and to retain his place as leader he must not try to do everybody else's job but essentially he must have powers of decision, communication and co-ordination. How I agree with W. A. Allen when he says in his paper: "A good building is a single organic embodiment of all its technical functions, its planning requirements and its aesthetic idea: it requires policy level thinking about each aspect in order to get it organized properly from the outset. We require therefore neither a mere acquaintance with these techniques, nor yet a full-blown computational familiarity, but the basis for sound policy decisions about design and this often involves not engineering alone, but economic, industrial, and human parameters." Many buildings will become more not less complex in the years to come and the good architect, by accepting the limitations of his own knowledge, will be the one who knows when to seek advice from others and how to use that advice when obtained. If he attempts in his training really to master such subjects as engineering, estimating, costing and production management, to name but a few, he is attempting the impossible; these are the spheres of the consultant, the quantity surveyor and the builder, by no means forbidden spheres but where the combined expertise required is quantitatively beyond the capacity of most men.

Whether the architect of the future remains independent of the building owner, whether he is employed on the staff of the building owner—and that building owner may be a government department, a local authority or a private concern—whether he finds himself as a principal in a building company, I suggest the above considerations apply. What then is his chance of leadership? Superior intellect or knowledge and a professional status will be insufficient by themselves to ensure the architect's position in future society, and by surrounding himself with a mystique of aesthetics he will lose, not gain, the confidence of the building public: without that confidence the chance of leadership will disappear for ever. To gain it he must show that he is capable of leading a team which can produce in time and at a predetermined price a building that looks well, functions well and is well built. If he can't, then he must not be surprised if the public turn elsewhere, and for the answer to this he must look at his present training.

But no good will ever come from builders disparaging architects and vice versa: accusations of incompetence on the one hand and roguery on the other can only do a disservice to the industry as a whole at a time when jointly we should be seeking the goodwill of those who give us our bread and butter.

### Joint Education

Such forebodings have been disposed of in the past, but it is my duty this evening to look at the future and here I put my money in 50 years on joint education and post-graduate specialization. And by "joint" I mean courses common and shared by builder, engineer, architect and quantity surveyor, not a college with separate faculties and a joint meeting of the clans for an occasional subject or a glass of coffee in the refectory, but three years' common grind, followed by two years' specialization—then out into the cold world or a further two years of post-graduate study.

The elaboration of this somewhat bald statement is again a paper in itself, but it is not put forward without quite a deal of thought and is, I believe, not an unrealistic

approach to the 50 year future. The three- and five-year break clauses permit a sorting out by the students themselves as well as by those in charge of their education, and they will, above all, produce the interchangeability and understanding so essential to the future. The seven-year end-product will be the potentially great architect of the future, a man trained to design and lead. There will be few of them, and it will be to them—the architects—to whom would-be owners of fine buildings will turn for guidance. The five-year product will work for the architects or they will go into building firms where they will take their rightful place according to their skill and responsibility. Some of them, of course, will always find a home in the smaller practice which does not aspire to tackling the large and complex building project.

If I am anywhere near the target in this crystal gazing, design and production will be co-ordinated in some cases and integrated in others. The designer will have on his staff men who understand production and who will supervise the project at the letting of the contract: the builder, or erector of buildings, will have on his staff men trained with a fundamental knowledge of design. There is every reason to believe that in an industry based on this type of organization there would be an interchange of staff between architect and builder.

Is there a place in this structure for those whose interest is art alone? Should there be a class whose responsibilities are limited to design? I think this is possible in the same way as the painter and the sculptor will continue to contribute to building. Such a designer might well work in conjunction with building firms on a particular project but preserve his independence on a consultant basis. Let us make no bones about it, however, he is not the architect of the future for he is solely an artist and the future architect cannot afford solely to be an artist.

Perhaps of all the points made so far the one I would like to emphasize most is the educational one of joint training. Again at the price of being unpopular I say that the R.I.B.A. more than any other body is to blame for not taking more realistic action in this sphere. The lip service paid to joint education in architectural circles and the failure really to face up to it has led me and possibly others to the conclusion that it is the belief of the architectural profession that they will be the losers by such a move and that it can best be resisted by inactivity.

What are the true reasons for the shyness of the profession's official body in this matter? Is it because they do not think joint education necessary? Is it because they do not know how to set about it? Is it because those in charge of architectural education believe that they personally would be the losers by such a move? Is it the vested interest of architectural schools in the *status quo*? Is it because deep down there is a feeling that there will be a loss of status or caste and a debasing of the architectural coinage? Or is it simply a belief in the inevitability of gradualness and a hope that "things will sort themselves out if left alone"?

These are dangerous and I suggest short-sighted concepts for, if my thesis is right, the future of the profession will be in jeopardy unless it accepts the fact that efficiency will result only from an analysis of the requirements of the industry, and a policy of training to meet those requirements. I have, in this paper, attempted to analyse these requirements over the next 50 years, first from the point of those who assemble the hundreds of thousands of components that go to make a building and, secondly, from the point of view of those who design and organize the erection. The time has come when such analyses should be carried out, not by amateurs like me, but by a research body, aided by all sections of the industry. Such analyses take time and time is not on our side, and since particularly it is not on the side of the architects, I would suggest that really urgent action be taken to give an honest look at joint education, for as I have said earlier, the future structure of the industry depends on economics and education: only the latter is within the industry's own control.



Photos: HENK SNOEK

A night shot, taken from the park, shows the main reading room with book store tiers beyond

## LIBRARY FOR SHEFFIELD UNIVERSITY

Architects: GOLLINS, MELVIN, WARD and PARTNERS

Assistant Architects: M. LITCHFIELD, B. J. MAYES, H. PRIME

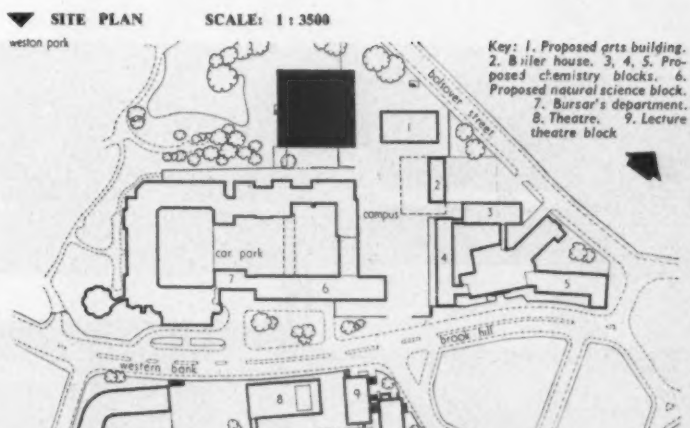
Quantity Surveyors: DAVIS, BELFIELD, and EVEREST

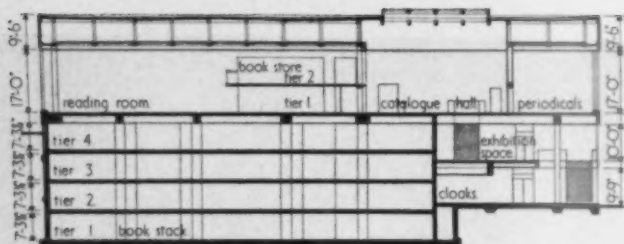
Structural Engineer: W. V. ZINN

Heating and Ventilating Engineers: G. N. HADEN & SONS LTD.

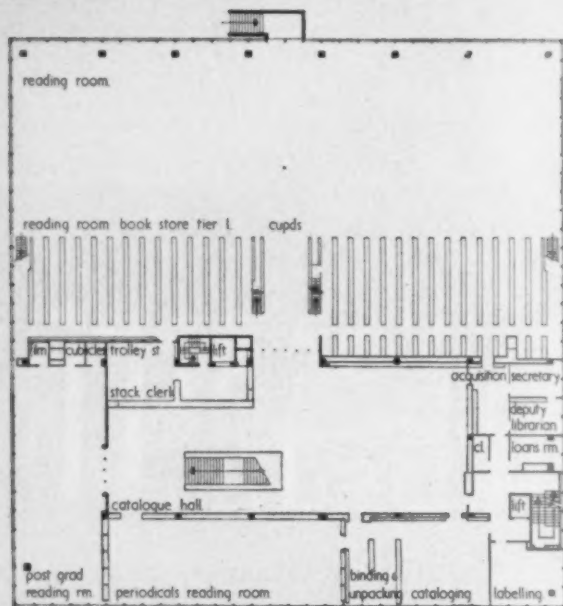
Electrical Engineer: H. B. LEIGHTON

A new library for Sheffield University is the outcome of an open competition promoted in 1953 (A. & B. N., 3.12.53) for the design of central areas in an expanding university. (Other developments may be related to the library in a site plan to the right.) Designed to house a million books, this precise piece of architecture sits happily within its environment (see photo on page 378) to prove, once again, that quality and not style can create harmony



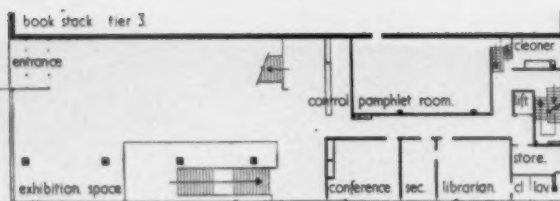


▲ SECTION

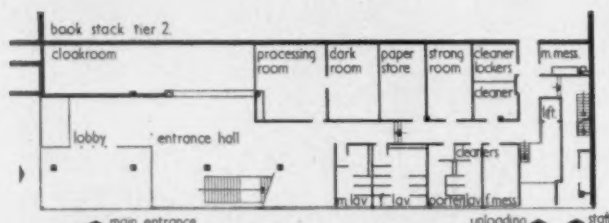


▲ FIRST FLOOR

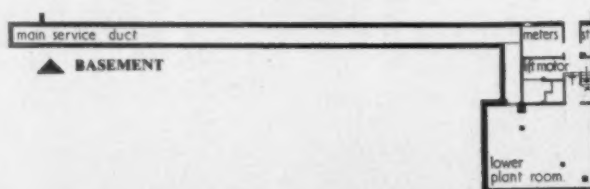
SCALE : 1 IN = 40 FT



▼ GROUND FLOOR ▲ MEZZANINE



Below, entrance doors at mezzanine level (see plans above), with an exhibition space to the right. At a lower level, the main entrance at pavement level. To ensure that no books can be taken away without the issue of a voucher, the plan divides into rooms within and those outside the entrance and exit turnstiles. A control point is situated on the mezzanine floor immediately before staircase access to the catalogue hall



▲ BASEMENT



## LIBRARY FOR SHEFFIELD UNIVERSITY

**T**HE site for the library is a corner of Weston Park which the city corporation made available for the university; it is roughly 160ft sq immediately to the north-east of the existing university buildings with a fall in level of some 20ft from west to east.

### Exterior Planning

The library is planned in the form of a square with each side 155ft long and 52ft high on the east or campus side and 32ft high on the west or park side. This siting of the library and its planning as a low square building has been chosen to allow it to act as a foil to the 17-storey arts department block on which constructional work is to start early in 1961 and to the long, low chemistry block which forms the east boundary of the campus and which is already under construction.

### Interior Planning

To ensure that no books can be taken away from the library without the issue of a voucher, the plan divides into the rooms within and those outside the entrance and exit turnstiles. Within the control lie all the rooms to which readers normally have access and which are approached from the centrally placed catalogue hall. In the catalogue hall are the card index catalogue cabinets, shelving for bibliographical and standard books of reference and the combined issue desk and voucher counter. Also within the control lie the main reading room and the two smaller reading rooms for post-graduates and current periodicals, access to all three being from the catalogue hall.

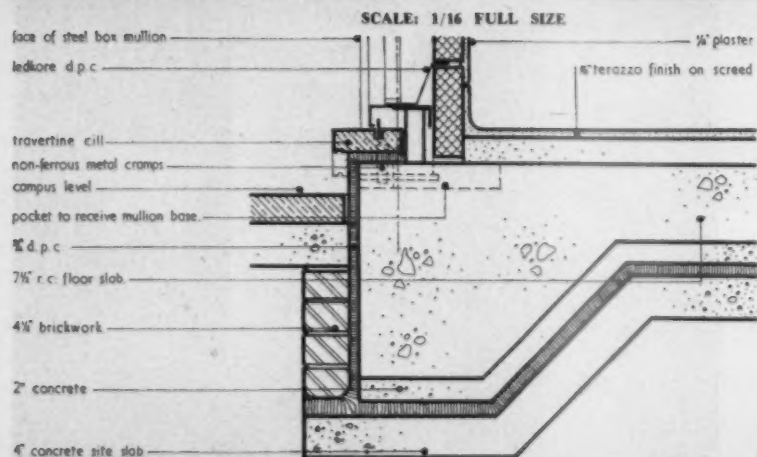
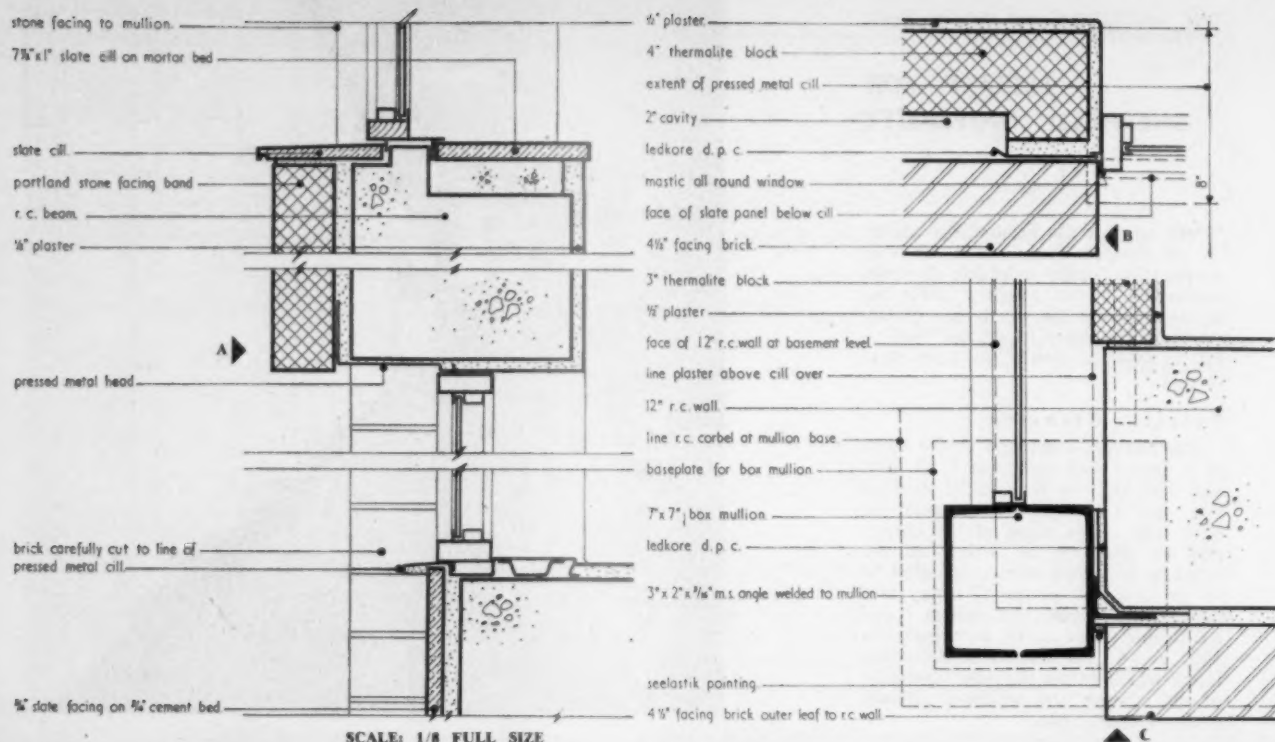
At the back of the main reading room, which has 76 tables and 280 readers, and immediately alongside the entrance, is a two-tiered, open-stack book store, holding approximately 130,000 volumes. In the post-graduate reading room there are 12 tables each for four readers, three microfilm cubicles and 55 private book lockers.

Outside the control on the ground floor are student cloakrooms, lavatories and service rooms; on the mezzanine, the librarian's, secretaries' and committee rooms, and on the main floor the principal working rooms (cataloguing and new acquisition rooms), and the binding and unpacking rooms. These rooms, although on the same floor as the reading rooms, can also be approached by a secondary non-controlled staircase having immediate access to the goods lift and the covered unloading

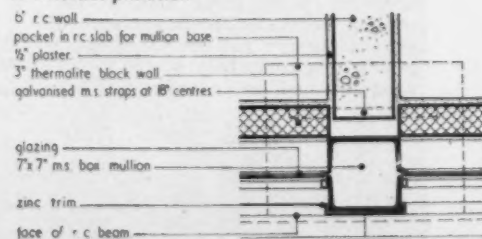


Two of the most important viewpoints on any library. Above, a corner of the main reading room with open access book store tiers. Below, part of the closed access book stacks which form a solid core to the building on four tiers (see section on facing page)





On this page are shown a number of key points in the structure. Top, three details of the north wall. A. Section at first-floor level adjacent to the secondary staircase (see plan on page 376). B. Junction: staircase windows to brick plinth. C. Junction: box mullion to brick plinth. Left, plinth detail on the main entrance facade. Below, junction box mullion to internal partition



bay. On the second floor lie the staff rest rooms.

The book stack, which has accommodation for 870,000 books on four tiers, lies immediately under the main reading room. Access to the stack, however, except for a small area on the top tier which is available for future extension of the reading room book store, is used only by the librarian's staff and as such is not readily accessible to readers.

#### **Construction**

The construction of the basement stack and the floors below the main reading room floor is in reinforced concrete. The floors in the book stack are in plate construction with no beams and each floor carries the book shelves of that particular tier only. This particular construction was selected in preference to the more usual type of steel stack, partly on account of the fire regulations and partly as the stack is largely below ground; the floors could act as buttresses to the perimeter retaining walls. The upper part of the building is framed with steel with 8ft deep lattice girders spanning the 80ft width of the main reading room. Externally the horizontal bands above and below the principal floor are faced in Portland stone. The non-structural steel mullions forming the window wall are faced externally with black painted aluminium and the principal window mullions to the ground and mezzanine floors on the campus elevation are box section steel pillars. The north, south and west façades below the main floor level are faced with dark blue-brown bricks.

*Continued on page 384*

### **LIBRARY FOR SHEFFIELD UNIVERSITY**



Standing at pavement level one sees the main entrance doors, while a look upwards shows the corner detail. The structure separates into two elements. Below the main reading room floor (expressed by the narrow horizontal in stone); it is of reinforced concrete. Above, a framework of steel gives large spans with open planning, while an 8ft deep roof space, within which lattice beams are placed, gives accommodation for large air-conditioning ducts

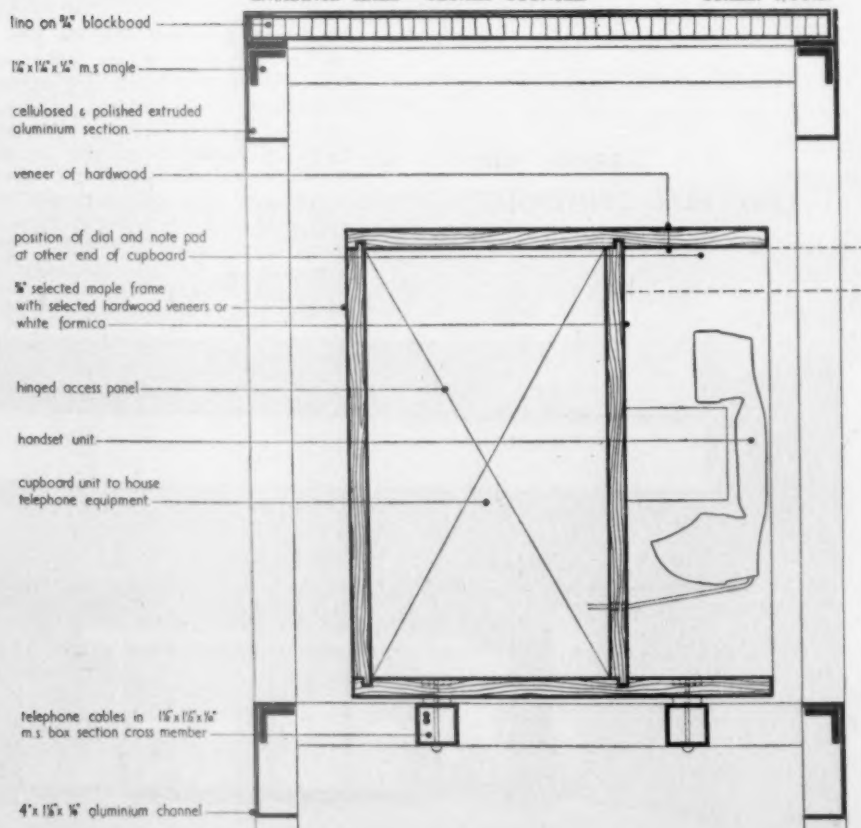


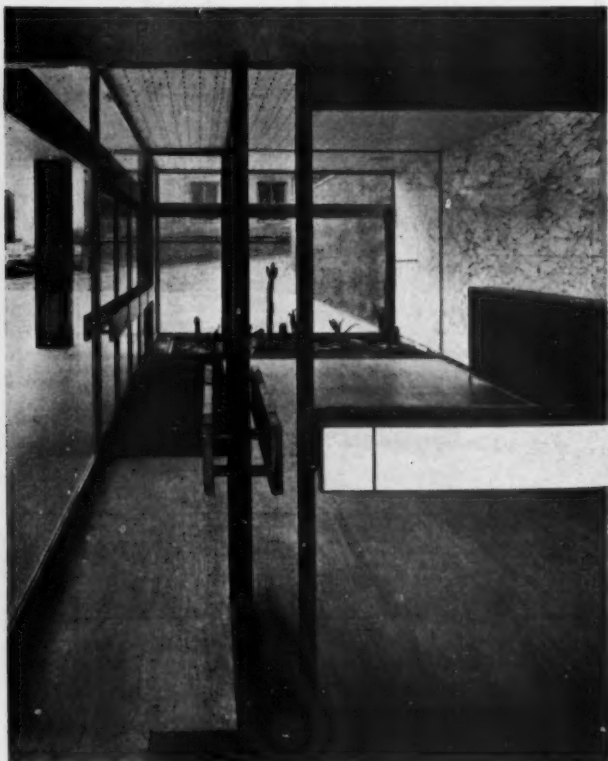


Above, another shot of the entrance hall, this time seen at night. Here a progression in circulation may be seen clearly in one view. From the main entrance hall at campus level, with cloaks space at the rear; on to the exhibition space and control counter at mezzanine level; to finish in the catalogue hall and reading rooms at first floor. The cloaks counter is detailed on the right. This should be related to further photographs and detail shown on the facing page

#### ENTRANCE HALL — CLOAKS COUNTER

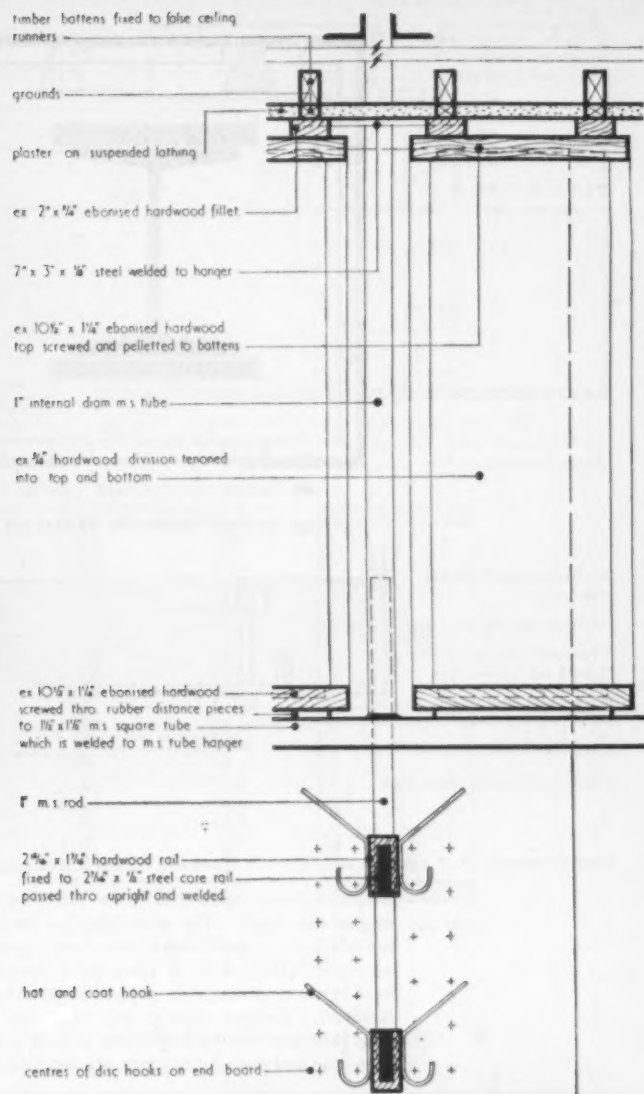
SCALE: 1/6 F.S.





## LIBRARY FOR SHEFFIELD UNIVERSITY

Above, looking back to the lobby from the entrance hall, and below, the cloaks space. Detail to fittings in the cloaks space is shown on the facing page and right. Rectangular metal framing to the counter is painted dark blue-grey, while woodwork is veneered in macassar ebony



ENTRANCE HALL — CLOAKS SPACE

SCALE: 1/8 F.S.



6" x 6" x 3/8" aluminium angle  
screwed and plugged to 18"  
square column, in one length

8" x 1/4" aluminium plate with  
matched butt joints

4" x 3/4" hardwood firing  
plugged and screwed to column



▲ DETAIL OF COLUMN CASING 1/8 F.S.

▼ SECTION THROUGH TREAD 1/6 F.S.

1/4" x 1/4" compressed laminated  
wood strips  
compressed laminated wood bung  
1/2" laminated nosing fixed to tread  
by brass cup and screw  
3/8" diam bolt fixing to  
7" x 1 1/2" m.s. tray  
1/2" ebonised hardwood riser  
compressed laminated wood tread

dotted line represents 2" x 2" angle fixing steel tray to 15" x 4" channel

5" x 2 1/4" polished teak handrail

1 1/2" x 1/2" m.s. flat to which balusters  
are also screwed via steel plug

1/4" polished plate glass  
bottom rail of 2 extruded-  
satin chrome sections

7" x 1 1/8" marble capping

1 1/2" x 1 1/2" m.s. tee welded to channel

1 1/2" ebonised hardwood

compressed laminated tread

2" x 2" x 5" m.s. angle

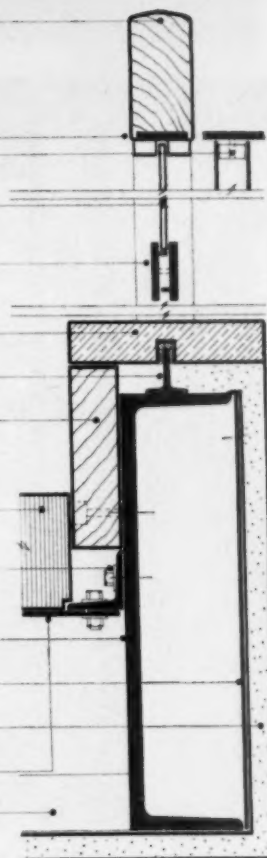
15" x 4" m.s. channel strings

sheet metal welded to channel

1/2" plaster on expanded metal

7" x 1 1/2" m.s. tread tray

2" x 2" angles welded to strings

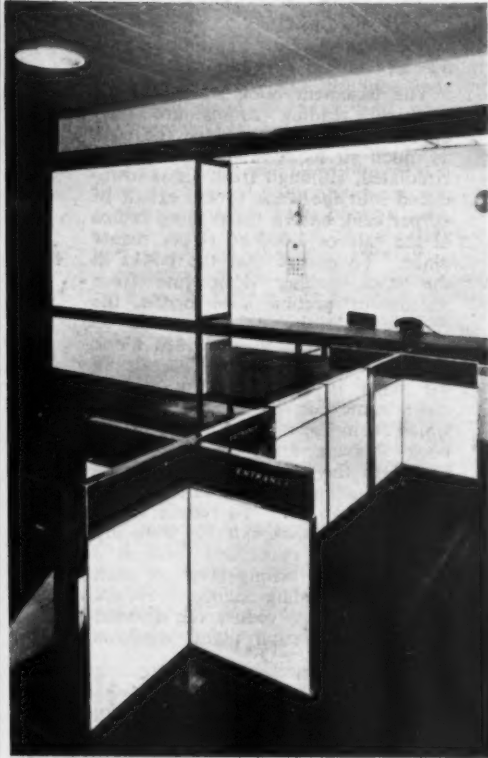


SECTION THROUGH BALUSTRADE AND STRING ▲

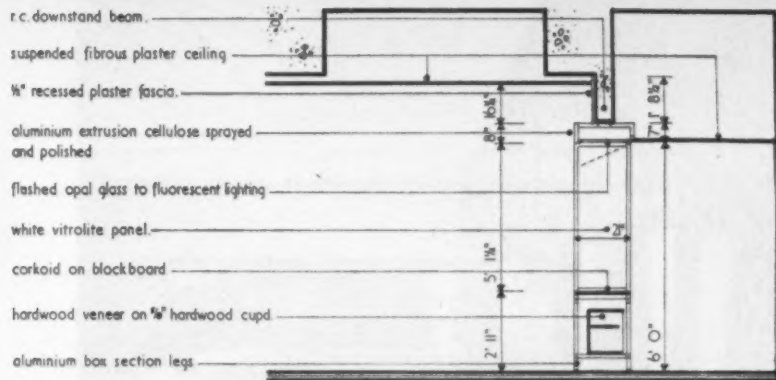
Below, looking down the main staircase from  
mezzanine level. The staircase has noir vein  
marble strings, dark brown laminated treads and  
ebonized risers, with a plate-glass balustrade  
held in silver bronze rails capped by a mahogany  
handrail. Column casings are cellulosed dark  
blue-grey and the ceiling white fibrous plaster.  
Staircase and encased columns are detailed above

**LIBRARY FOR SHEFFIELD UNIVERSITY**

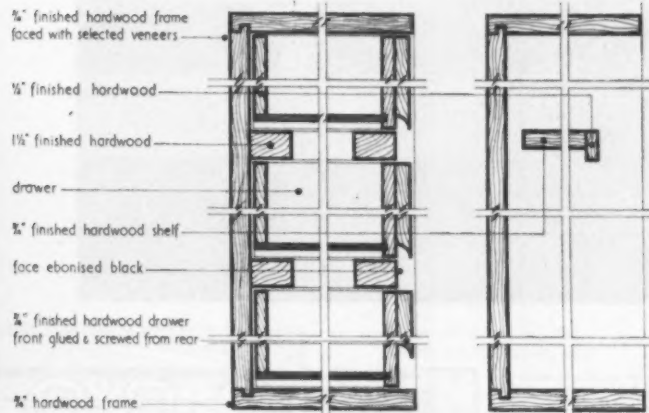




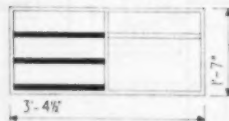
Above, the control counter at mezzanine level, see detail right. Below, a detail shot which indicates that equal care has been taken over the design of such a humble item as door furniture. See also push plate detail on page 385



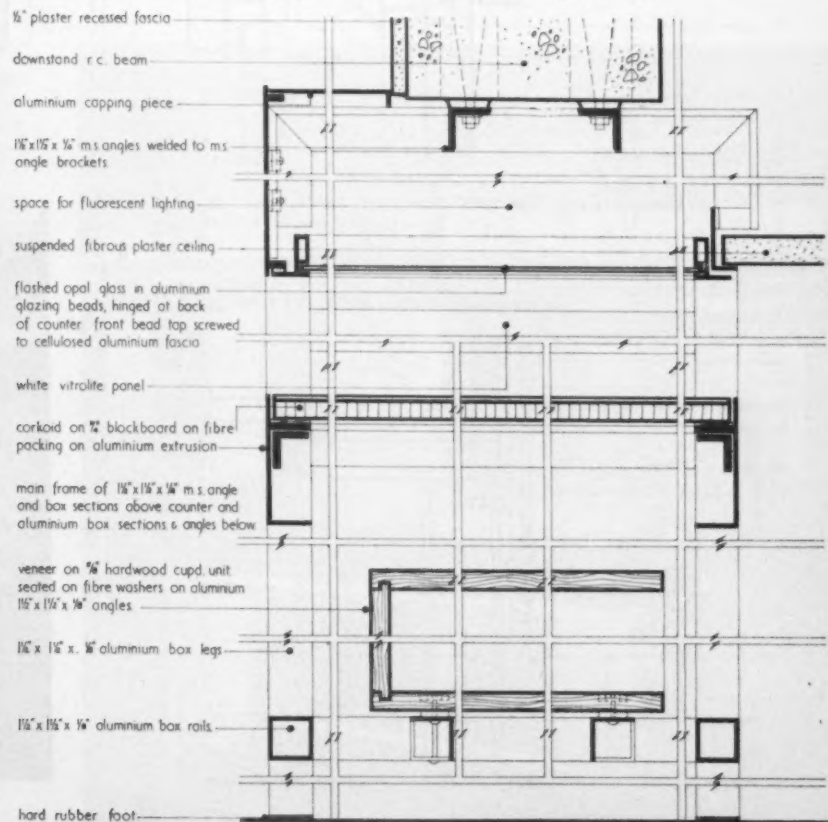
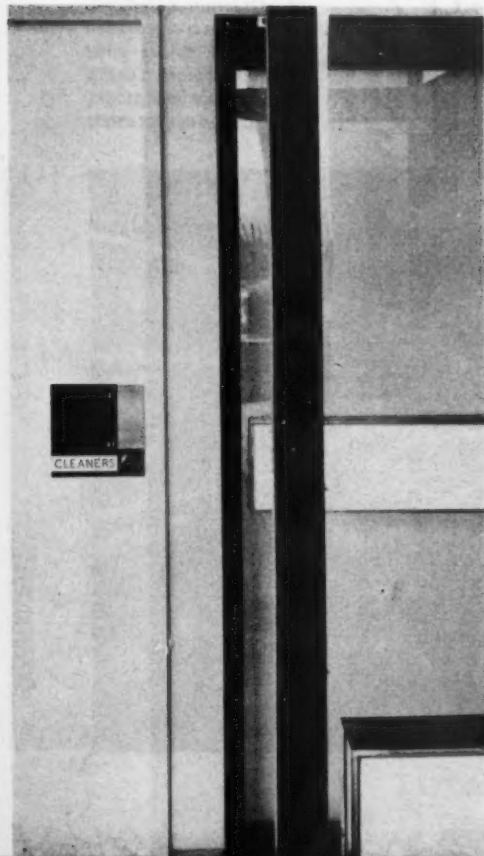
▲ KEY SECTION THROUGH CONTROL COUNTER  
SCALE: 1 IN=6 FT



▲ KEY ELEVATION AND DETAIL SECTION  
CUPBOARD AND SHELF UNIT  
SCALE: 1/6 FULL SIZE



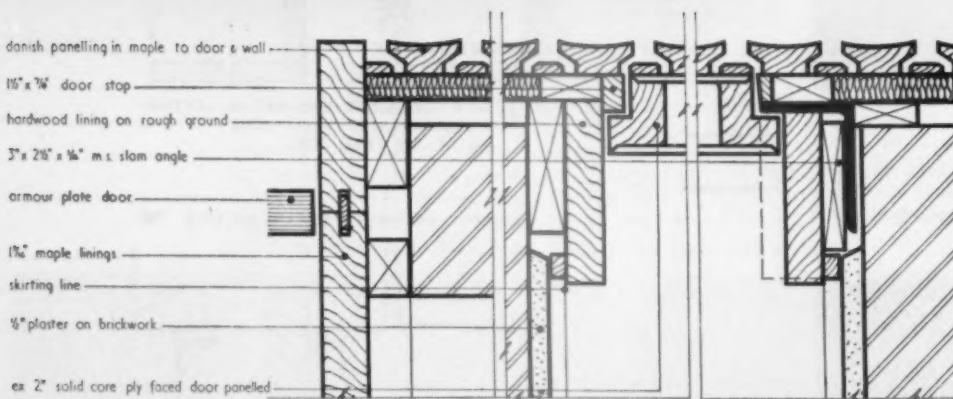
CONTROL COUNTER — DETAIL SECTION ▼



## LIBRARY FOR SHEFFIELD UNIVERSITY

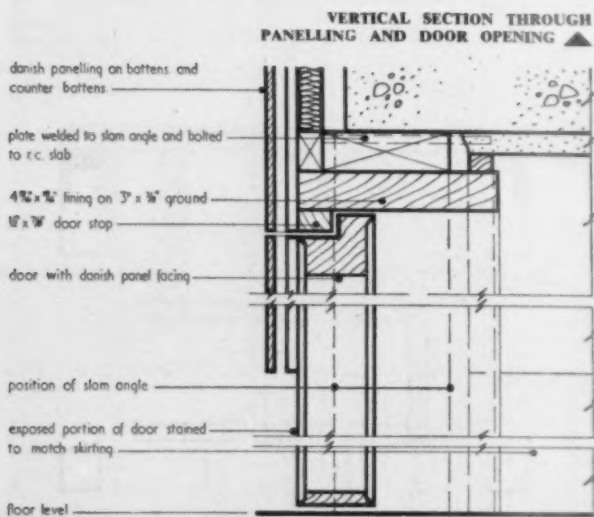
### Services

The basement book stack and the principal reading rooms are fully air-conditioned. To reduce the cost, as much air as possible has been re-circulated, although fresh air is introduced into the stack to the extent of 10 per cent, and in the reading rooms at the rate of 1,000 cu ft per reader place. To ensure that the books in the stack neither deteriorate from mildew or become over brittle, the relative humidity never exceeds 65 per cent, a requirement which alone demands refrigeration. The air in the stack is distributed by vertical ducts some 3in by 20in in section which form the metal uprights of the book shelving and which are connected to the main horizontal distribution ducting in the false ceiling above the top tier. To reduce fabric losses, all the stack external walls are lined with 2in cork, and there is a heating coil at ceiling level on each tier. In the reading rooms, to reduce solar gain and to reduce the demand on the refrigeration plant, windows



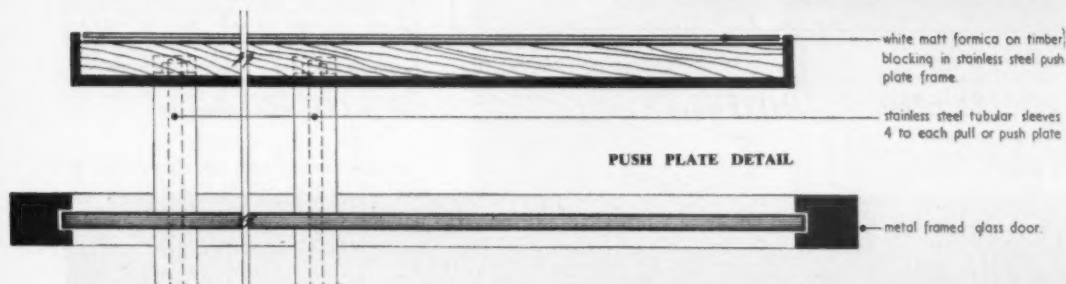
CATALOGUE HALL — SECTION THROUGH PANELLING  
SCALE: 1/4 FULL SIZE

The photograph above shows a voucher and staff counter in the catalogue hall. Floor, grey linoleum; lift wall on the left in alpes green marble; end wall, white plaster; wall on right, maple strip (see detail on left); illuminated ceiling, white corrugated plastic sheets in alloy channels. Below, a detail of adjustable book stacks in the closed access areas

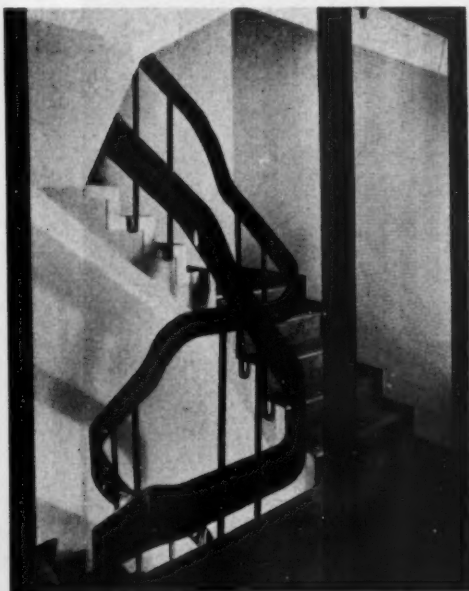


facing south and west are glazed with double anti-sun glass insulite panels. All rooms which have air conditioning have fixed windows and only those relying solely on radiators and convectors have opening lights. The ceilings of the reading rooms are in Frenger pierced aluminium panels which are clipped to the heating coils, above which is a layer of insulating and sound absorbent material.

Lighting in the reading rooms is by flush fluorescent fittings which can be lowered to allow ease of replacement. The catalogue hall has an overall corrugated plastic translucent laylight, above which are fluorescent lights at high level. Elsewhere lighting is by tungsten fittings. There are three electrical lifts; a goods lift connecting the covered loading bay and the workrooms, and a book trolley lift and book lift which connect the voucher counter and catalogue hall to all the book stack tiers. There is a fire detection system in all principal rooms which is connected to the nearest local fire stations.



Top, a corner of the post-graduate reading room. The window in a maple strip wall at the rear gives light to microfilm reading cubicles. Below right, the supervisor's desk in the main reading room. Below, a staircase serving book stack tiers



## COST ANALYSIS OF CONTRACT PRICES

Tender date .. .. .	October 1955
Work started .. .. .	December 1955
Work completed .. .. .	May 1959
Tender price accepted	Foundations, superstructure, installations and finishes .. £512,042
	External works including drainage and auxiliary buildings £13,278
	Total £525,320
Superficial area .. .. .	104,840 sq ft

	Total £	%	Per F.S. s. d.
Preliminaries and Insurance .. .. .	15,300	3	2 11½
Contingencies .. .. .	25,600	5	4 9½
Work below ground floor level .. .. .	40,942	8	7 9½
Structure and cladding .. .. .	189,450	37	35 11½
Internal finishes .. .. .	55,100	10½	10 6½
Fittings (cloakroom, counters, racks, etc.)	44,850	8½	8 5½
Partitions and doors .. .. .	12,800	2½	2 5½
Hot water, heating and ventilation .. .. .	66,500	13	12 10
Electrical installation .. .. .	44,800	8½	8 8½
Lifts .. .. .	12,800	2½	2 6½
External plumbing and sanitary fittings .. .. .	3,900	¾	8
Total cost .. .. .	£512,042 (excluding external works £13,278)		
Cost per ft super .. .. .	97.8½		

General Contractors: W. J. SIMMS SONS & COOKE LTD.

## Sub-contractors and suppliers:

Air Conditioning Ducting: Andrew Machine Co. Ltd.  
Asphalt Paving and Cork Insulation: Limmer & Trinidad Lake Asphalt Co. Asphalt Tanking to Basement: Val-de-Travers Asphalt Ltd. Balustrading and Handrails: Grundy Arnatt Ltd. Cloakroom Fittings: Conran Furniture. Cloaks: Gents & Co. Ltd. Collapsible Gates: The Bolton Gate Co. Ltd. Cork, P.V.C., and Linoleum Flooring: Horsley Smith & Co. (Hayes) Ltd. Counter and Joinery Fittings: W. J. Simms Sons & Cooke Ltd. Curtains: Liberty & Co. Ltd. Danish Panelling: John Dale Ltd. Double Glazing Units: Pilkington Bros. Ltd. Electrical Installation: Yorkshire Electricity Board. Electric Light Fittings: Troughton & Young (Lighting) Ltd.; The Merchant Adventurers Ltd.; Associated Electrical Industries. Extruded Aluminium Columns: Northern Aluminium Co. Ltd. Facing Bricks: Richard Parcon (Builders Merchant) Ltd. Fibrous Plaster and Acoustic Tile Ceilings: Claridges (Putney) Ltd. Fibrous Plaster Mullion Casings: Claridges (Putney) Ltd. Fire Detection Installation: The Pyrene Co. Ltd. Furniture and Fittings: Conran Furniture. Glass Lens Rooflight: Lenscrete Ltd. Hardwood Block and Strip Flooring: Acme Flooring & Paving Co. Ltd. Ironmongery: Smith Bros. & Widdowson Ltd. Laminated Wood Stair Treads and Landings: Hardern-Richmond Ltd. Library Bookstacks and Shelving: Raneau Ltd. Lifts: Otis Elevator Co. Ltd. Linoleum: John Walsh Ltd. Lumenex Ceilings: Lumenated Ceilings Ltd. Main Reading Room Ceilings: Franger Ceilings Ltd. Marble Wall Linings, Facings and Flooring: Walter W. Jenkins & Co. Ltd. Mechanical, Heating and Air Conditioning: G. N. Haden & Sons Ltd. Metal Windows, Doors, Ventilators and Frames: Mellows & Co. Ltd. Modular Fittings (Lower Gear): London Electric Firm Ltd. Partition Blocks: Thermalite Ltd. Paint: Janson & Nicholson Ltd. Paropa Roof Paving: Fraxzi Ltd. Plywood Panelling: John P. White & Sons Ltd. Portland Stone: Bath & Portland Stone Firms Ltd. Progress Photographs: Derek R. P. Fellows. Protection to Portland Stone: R.I.W. Protective Products Ltd. Sanitary Fittings: W. Emery & Co. Ltd. Slate Copings and Cills: John Fletcher Dixon Ltd. Sprayed Asbestos Columns: Dicks Asbestos & Insulating Co. Ltd. Stainless Steel Ventilators: J. R. Bramah & Co. Ltd. Steel Gate: Hobbs Hart & Co. Ltd. Structural Steelwork: Thos. W. Ward Ltd. Terrazzo Paving: Hodkin & Jones Ltd. Tier 4 Suspended Ceilings: Sundeala Board Co. Ltd. Timber Doors: F. Hills & Sons Ltd. Travelling Cradle and Gear: Palmers Travelling Cradle & Scaffold Co. Ltd. Turnstiles: Dixon Powner & Sons. Window Blind Gear: W. J. Furse & Co. (London) Ltd.

## LIBRARY FOR SHEFFIELD UNIVERSITY

▼ The reading room



A central feature in the form of a "finger of light" points 100ft to the roof of the exhibition hall, symbolizing an extension of the public exhibition to the first floor. The Rotaflex light fitting was designed by Misha Black in association with John Reid

## Furniture

In this article Abner reviews the furniture exhibition (Earls Court, January 25 to February 6) in retrospect, with comment on recent developments within the furniture industry. Photographs of items discussed are cross-referenced with detailed information given in tabular form on pages 394-395

THE revolution that has come about in that part of the furniture trade that shows itself to the public at the Furniture Exhibition is one of the most remarkable things that has happened in the design world since the war. Less than five years ago the public was not admitted at all to what was the most dreadful display of hideous things. The only signs of hope for the trade at that time were to be found on the stands occupied by the C.o.I.D. and, later, by various schools of furniture design. There were, however, even then, some firms in the industry producing good, cheap stuff, but they mostly stayed away. When the *Daily Express* started to sponsor the show a section of it was opened to the public and things began to happen, slowly at first. The exhibition has since then steadily improved, both as to setting and contents, until this year it appeared as a first-rate exhibition.

I do not think that we are one of the leading style setters in first-rate furniture, but I do think that our designers and manufacturers are now producing a very good range of well-made stuff and one which no longer disgraces us. There are still far too many horrors but there is also a wide choice of pieces that one could at least live with. Indeed one might in time become fond of some of them. The biggest improvement seen this year was that manufacturers of the sounder sort had stopped trying to

*Continued on page 307*



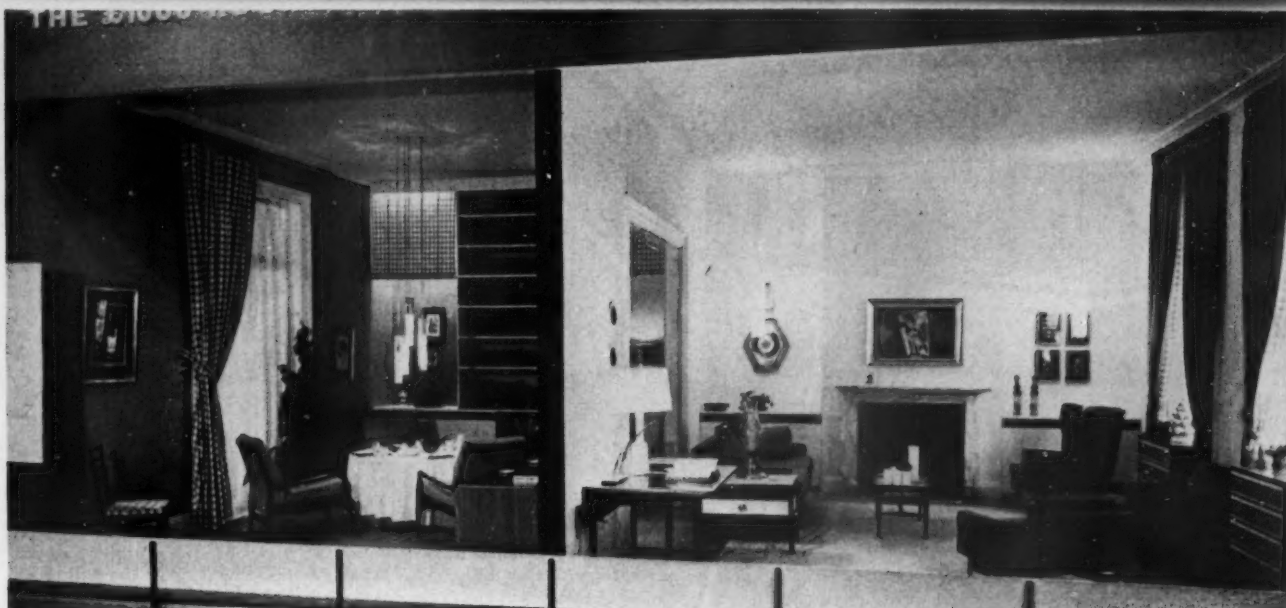


*"Rooms on a Budget". The £100 rooms by Thurlow Conolly, of the Design Research Unit ▲  
The £400 rooms by Elizabeth Henderson, of the Design Research Unit ▼*



*The £800 rooms designed by Jo Patrick ▼*





▲ The £1,000 rooms designed by Dennis Lennon

## Furniture

produce different designs just for the fun of it. Many of the pieces shown were, in fact, developments of those shown last year.

The layout of the exhibition and the Shell stands were designed by Misha Black and his boys from D.R.U. It was one of the most successful trade exhibition layouts I have seen. The central feature was something of a joint affair. Misha Black designed it with John Reid to help with the very effective "finger of light" and Peter Shephard to do the charming flower beds or boxes. The C.o.I.D.'s own exhibit was grouped around the finger and was designed by Stefan Buzas. I thought that the whole centrepiece looked charming from above, but a bit confusing from the ground. The furni-

ture exhibited by the C.o.I.D. was displayed on a number of little islands over which were suspended large plastics sunshades. Looking through the exhibit I thought the outlines confusing and disturbing to a peaceful inspection of the goods shown. The two temporary staircases designed by Misha Black were fine and gave vantage points for very gay views of the main hall. The standard of lighting was intense, in fact it seemed to me, electrically, the brightest exhibition ever, so much so that much of the colour of things was quite removed.

### Rooms on a Budget

This year in place of "Right and Wrong", of "Before and After", the set-piece by the interior design experts consisted of a pair of basic rooms taken from a typical nineteenth-century London house. Five designers were asked to prepare schemes, each to a budget ranging

from £100 to £2,000. The five solutions were shown side by side. The budget part of the exercise was no more or less accurate than such things usually are in an exhibition, but it served as a guide for comparison. The rooms had to be furnished with furniture on show in the main exhibition.

The £100 rooms were designed by Thurloe Conolly, of D.R.U., and were very successfully done on ordinary unpolished wood which would have looked pretty drab after six months' wear and not nearly so good if it had had a coat or two of sealer to keep it clean. Nevertheless, the things were well chosen and the general effect spacious and home-like.

### The £400 Rooms

Elizabeth Henderson, also of D.R.U., designed the £400 rooms and the result was rather similar to the first pair with more money spent on

▼ The £2,000 room designed by Margaret Casson and John Clarke



## Furniture

them. There was still plenty of space and very little nonsense. I found the panelled wallpaper over the stove in the dining room too powerful and boring, particularly as it quite overwhelmed the charming little stove.

### The £800 Rooms

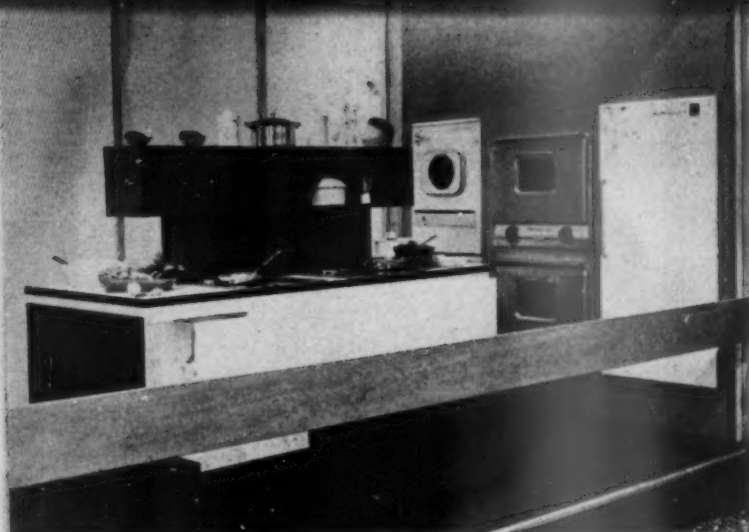
£800 is a fair amount to spend on two rooms and Jo Pattrick judged that for the money she could do some fairly extensive alterations; blocking out a fireplace, altering the wall between the rooms, and installing an indoor garden. The result, though less spacious than the cheaper rooms, was a cosy home. It had an atmosphere of reality and poise, with no feeling of experiment. It was, I thought a thoroughly professional job. The furniture was light and small in scale, and colours were warm and comfortable. I suppose the real reason I liked these rooms was because they imposed no pattern of living on the owners. Unexperimental, in-a-rut, the same mixture as before perhaps, but expertly done and full of atmosphere. I had two criticisms, however; the first was that I found the dark tiled chimney breast rather too much of a good thing. Sitting by the fire one's eyes, if not actually on the fire, rest somewhere on the chimney breast and a picture or mirror helps, and a shelf, though maybe unfashionable, is very useful. My second quibble is about the bookshelf which I thought should have had some visible means of support either by continuing to the sides of the recess or by being taken to the ground.

### The £1,000 Rooms

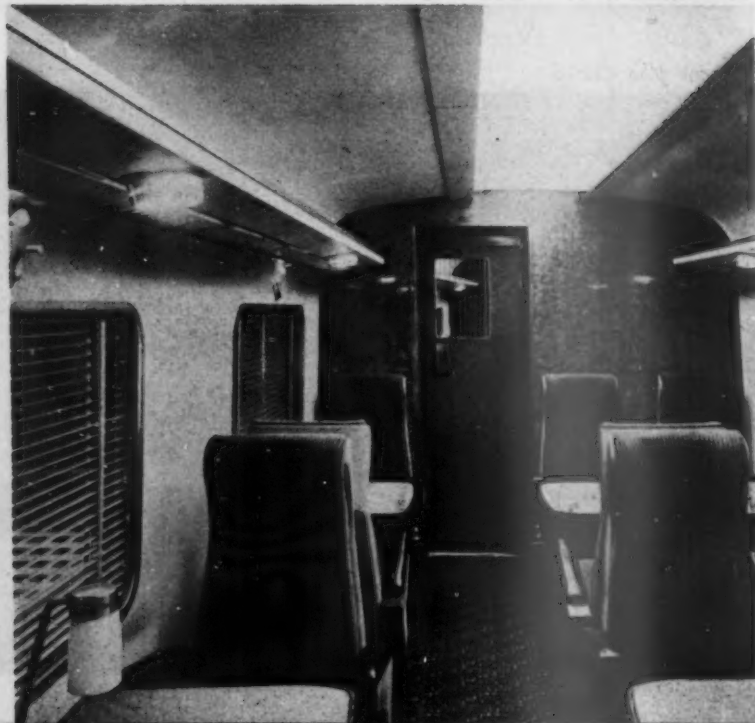
Dennis Lennon spent his £1,000 on a small number of expensive pieces. The result did not seem to hang together very well. For one thing, his dining room was in matching reds, floor, walls, and furniture. It certainly made a splash when new, unequal fading might have done terrible things to it. He also had the curious idea of using full-sized, low easy chairs at the dining table. This might suit those who normally pick at their food with their legs crossed, while smoking a cigarette, but not me. The living room had, however, an air of spaciousness and expensiveness, but I thought that such real quality as it had came from the "objects" hung on the walls and plants on the furniture, which were not included in the budget.

### The £2,000 Room

The really rich room, £2,000 spent by Margaret Casson and John Clarke.



Above, the kitchen of the "Home Magazine" stand with all major equipment built into the wall (reference 1 in the table on page 394). Below, R. D. Russell's scheme for a stateroom in the new Orient liner "Oriana". Bottom, a mock-up of part of a first-class Pullman car for British Railways, by Jack Howe





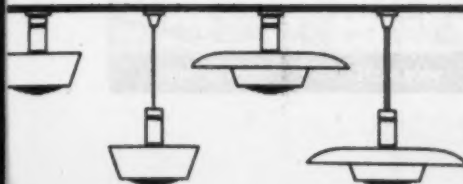
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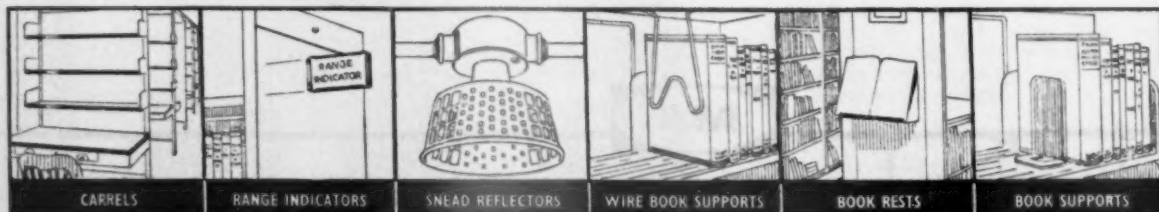


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## Furniture

of the R.C.A., certainly looked its part. The designers had clearly had some difficulty in finding sufficiently expensive furniture of good design and had turned to major structural alterations, including the removal of a cross-wall and a change of level for part of their scheme. Expensive special lighting arrangements, let in flush with ceiling, cost a great deal, but provided a special dramatic look which is quite lacking in the photograph. Floor surface in living and dining rooms were as sharply contrasted as possible, the former being long-haired goatskin and the latter polished marble tile. One plain wall, rather spoiled, I thought, by an undistinguished piece of sculpture and muddy picture, was set against two coloured and textured walls. The room was shown at night with the boldly patterned curtains drawn. The opposite wall had panels covered in the normal sized squares of gold leaf. This was a brilliant idea and was most successful. The living area, richly littered with books, had sophisticated knick-knacks, and had an air of untidiness which did not quite suit the style. However, one had the feeling that a Chinese servant might at any moment glide silently in and put it all right. For my taste the furniture was all rather too near the ground. Once lowered onto or into any of the seating arrangements, I would have eaten my dinner there. Indeed, anything rather than having to sit on one of those glassfibre and nylon music stands in the dining room. This scheme was a first-class piece of design which depended on skilful lighting for its total effect.

The whole idea of these rooms was to show modern British furniture in use and they did this very well. As a show of the art of the interior designer they were less successful. A room is to be in, not to be seen with one wall removed, and this presents an entirely different problem. Leading the crowds through furnished rooms may be satisfactory at Versailles or Hampton Court, but it does not come off at the Ideal Home Exhibition. The best solution I have seen so far was in the "exploded" flat which formed the British contribution at the H55 Exhibition at Hälsingborg, Sweden. There a widened passage led the crowds through Jo Patricks' flat without actually upsetting the rooms, and one had the sensation of being inside.

### Home Magazine

This stand, designed by Spencer & Gore on a rather awkward triangular site, caused a good deal of comment, mainly because of an unusual kitchen shown as part of a flat. Hot-plates and working surfaces were accommodated on a cen-

*Continued on page 394*



One or two firms are making well-designed kitchen fittings, although they do not always show them to the best advantage. Above, equipment by Wrighton. Below, part of a section devoted to the artist in your home (see text on page 394)





2



3

2. Plain and well detailed standard wall bookcase and desk. From one of the "Fyne Ladye" range. 3. Neat and inexpensive armless chairs by Ercolani

## Furniture

On this and the following page we illustrate a number of items of furniture with a brief description. Each photograph is given numerical reference which refers to the fuller information in tabular form printed on pages 394 and 395



6

6. The Marlowe chair. A neat and not too bulky upholstered piece made by R. S. Stevens Ltd. 7. An adjustable backed dining chair designed by Robin Day

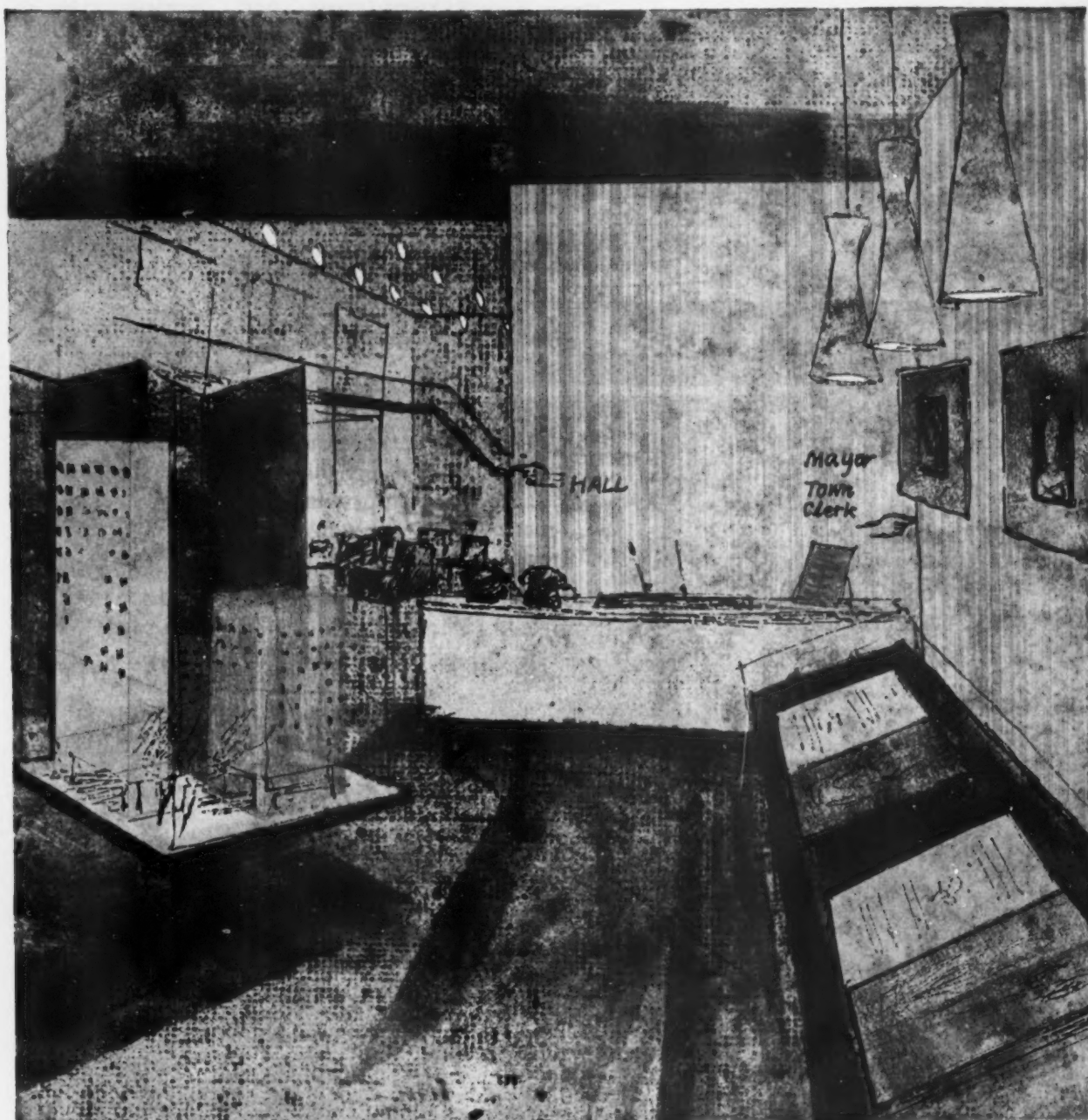


7

10. A sober and very practical dining room set by D. Meredew Ltd. 11. Furniture for the Stag Cabinet Co. Ltd., designed by John and Sylvia Reid

10, 11





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4. An unusual suite designed by Joseph Nottage. 5. Simplicity is still the key to Conran's designs. This soft armchair is typical



5  
**Furniture**



8. A Charles Eames adjustable reclining chair exhibited on the Hille stand 9. Another dining suite by John and Sylvia Reid for the Stag Cabinet Co. Ltd.

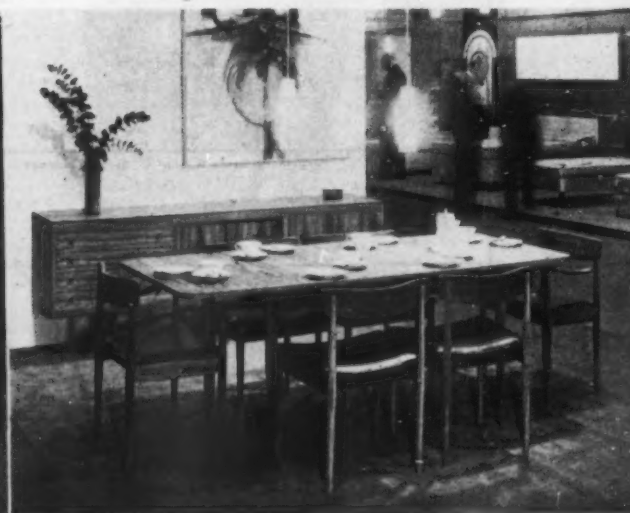


8, 9

12, 13. Furniture from the Archie Shine Ltd. stand. Left, three very pleasant and simple dining chairs; right, a dining room setting



12, 13



## Furniture

tral island, while ovens, washing machine and refrigerator were let flush into the wall. The various structural and insulation difficulties of this exercise had not, I think, been very thoroughly worked out. From an appearance point of view the wall was not really a success as it looked too like the furnace room at a crematorium, complete with observation windows to show how the bods are getting on.

The dining room was placed in an open-air bandstand, pretty, but draughty, while the open hearth fireplace was backed by a window filled with obscured glass. The overall effect of the scheme was unusual enough to draw crowds. I think we shall hear more of these designers.

### Railway Coach, and Cabin

A mock-up of part of a car from Jack Howe's diesel Pullman train—the finished article of which is said to be waiting in the sheds unusable because of staff trouble—was also shown. Neat and well detailed though it is, it seemed to me to be overlit. Surely the great strip of brightly lit ceiling is unnecessary? I shall look forward to travelling in this train as I feel sure that it is one of the things now coming off the drawing board which will help to restore the prestige of British Railways.

A double stateroom from the new Orient Line's *Oriana*, and designed by R. D. Russell, seemed as big as a fair-sized flat. The woodwork was beautifully detailed as you would expect, but the rooms had, for one, no feeling

of the sea. Perhaps it is required that this should be so. Perhaps, too, it is stupid to suggest a boating idiom should be adopted in so large a ship. Without circular scuttles and beds, one above the other, it is, after all, not very easy to convey the impression that the cabin is a cabin and not a hotel bedroom. Perhaps they are right after all.

### "The Artist in Your Home"

I noticed that several manufacturers were using modern paintings on their stands. Five years ago one would not have believed such a thing possible. No doubt Misha Black had something to do with it, for quite a large area in the gallery on the first floor was given up to a feature, "The Artist in your Home". This consisted of a series of free-standing, floor-to-ceiling panels to give oblique views in various directions. The panels were white and formed a background for modern paintings and sculpture. Well-chosen pieces of furniture were also used in the composition. This was an excellent idea. The setting, contrived to give each picture a little privacy, did not, to my mind, entirely succeed.

Within Misha Black's admirable layout, which included a simple stand framing, the exhibitors did what they liked and while many obviously took professional advice, many obviously did not. The furniture manufacturing industry as a whole may well be well pleased with its progress, but it has still a long way to go before it can claim to be in the front rank, let alone leading the world.

A second dining room setting on the large stand devoted to the products of Archie Shine Ltd. Designer Robert Hermitage (see reference 14 in the tabulated information on page 395)

### Tabulated Information

Photograph reference and item	Manufacturer	Designer	Dimensions	Materials and finishes	Price
1. Built-in kitchen unit designed as a mock up		Spencer & Gore	6ft 6in high x 3ft 6in Top: 1ft 6in x 1ft 6in Length: 4ft 6in	Spine wall through centre of unit houses service such as water and electricity and supports the whole unit. All in timber.	
Radiant plates	Moffats Ltd.				£30 10s for a group of 2 with thermal guard
Built-in 'fridge	Westinghouse Elec. International Co.				£272 10s
Built-in ovens	"				£116 13s 6d each
Built-in washer dryer	"				£158 £122
2. Bookcase	Henry Scone & Son (Furniture) Ltd.	Richard Hornby	3ft wide 11½in deep 3ft 9in high	Oak or Mahogany or Walnut	£21 £19 19s £19 19s
Desk	"	"	2ft 8in wide by 1ft 4in deep 3ft 5½in high	Mahogany or Walnut with Sapele veneer	£27 £29 5s
3. Chairs	Ercol Furniture Ltd.	L. B. Ercolani	31in high 20in wide Overall depth: 2ft 6in	Natural waxed finish—Beech. Also polished to dark or ebonized colour. 3 different ranges of covers.	13gn 14gn 15gn according to cover.
Table	"	L. R. Ercolani	14½in high 3ft 5½in long 1ft 3in wide	Natural colour finish. Underpart and legs: Beech. Top: Elm.	£7 10s

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## Furniture

## Tabulated Information—continued

Photograph reference and item	Manufacturer	Designer	Dimensions	Materials and finishes	Price
4. Table	A. Arenson Ltd.	Joseph Nottage	47in by 26in Extends to 59in	Framework: Wrought-iron. Top in melamine plastic in a wide range of colours, also multicoloured.	£22 1s
Chairs	"	"	"	Upholstered in a wide range of colours and materials.	£7 1s each
Sideboard	"	"	47in wide 17in deep 32in high	Top in melamine plastic. Interior in man-made materials, washable.	£25 2s
5. Chair	Conran Furniture	Conran Design Group		Frame: lin square tube, stove-enamelled eggshell black. Seat finished with domed plastic ends. Upholstery in wide range of wool, cotton or linen or leather. Arms: African Walnut.	From £21 10s 6d to £26 approx.
6. Marlows Chair	R. S. Stevens Ltd.	Ronald E. Long	Seat height: 21in Overall width: 34in Depth of seat: 21in	Any material and colours.	From £32 13s 6d to £38 6s 6d
7. Adjustable-back chair	Hille of London	Robin Day	29in high Seat height: 18in Seat width: 20in With arms: 22in wide	Teak and leather, any colour.	17gn With arms: £26 12s
8. Reclining chair	Hille of London under licence from Harmin Miller Co. (America)	Charles Eames	39in high Seat height: 15in Seat width: 26in Depth, front to back: 30in Scoil height: 17in Width: 21in Depth: 21in	Aluminium frame with nylon arms. Cover: Man-made fibres, in a choice of colours.	£60  Scoil: £24 6s 6d
9. Table	Stag Cabinet Co. Ltd.	John and Sylvia Reid	27in high Length: 5ft extending to 6ft 4in	Top is finished in oiled-teak veneer. Steel legs are satin nickel plated.	£17
Chairs	"	"	"	Steel framed satin nickel plated. Upholstery in real leather on Dunlopillo on a formed ply base. 2 colours—black or natural coloured. Wooden back is shaped from the solid.	£8 15s each
10. Table	D. Maredev Ltd.	Italian designed	Open: 6ft 1in x 3ft 3in Closed: 4ft 5in x 3ft 3in	Teak. Oiled finish.	£40 2s 7d
Chairs	"	"	"	Teak. Oiled finish. Wide range of coverings.	£6 13s each
Sideboard	"	"	5ft 7in long	Teak. Oiled finish.	£36 10s
11. Sideboard Consists of 2 units: Storage unit: 3ft Sideboard unit: 4ft 6in	The Stag Cabinet Co. Ltd.	John and Sylvia Reid	This set is designed on a 1ft 6in module	Oiled teak. Metal legs and handles, nickel plated.	£19
Drop-leaf table	"	"	Length 3ft extending to 4ft 3in Width: 1ft 6in	"	£16
Chair	"	"	"	"	£8 15s
12. Chair on extreme left. This is not yet in production, but has same frame as middle chair. Dorington chair (middle)	Archie Shine Ltd.	Robert Heritage	17in back-to-front 17in seat height 28in total height 20in wide	Thick coachhide seat.  Teak or Rosewood or Mahogany Also available with arms (Carver) Mahogany Teak Rosewood Black plastic cloth (also other colours).	£10 6s £14 14s £8 19s 7d £12 16s £13 3s 6d £18 13s 6d
Chair on right: Milkmaid	"	"	20in wide 17in from back to front 17in high to seat 29in total height	Same woods. Covers: Tibor Reich & Donald Brothers.	Same prices
13. Dorington Sideboard Hamilton table	Archie Shine Ltd.	Robert Heritage	7ft long, 18in deep 2ft 6in high  4ft 9in closed 6ft 6in open 2ft 11in wide 2ft 5in high	Teak or Rosewood or Mahogany and Rosewood. Metal legs.  Teak (see below)	£70 7s 10d  £42 15s 3d
Milkmaid chairs	"	"	"	(See above.)	
14. Hamilton table	Archie Shine Ltd.	Robert Heritage	6ft long closed 8ft long—open 2ft 11in wide 2ft 5in high	Rosewood or Teak. Combination of Rosewood and Mahogany, Indian Laurel and Walnut.	£96 14s 11d
Chairs:	"	"	22in front to back 19in wide 18in seat height 33in to height at back	Rosewood and usual combinations. See above.  Also Carver.	£15 8s £20 2s 9d

## Industrial Notes

● Laycock Engineering Ltd. (Garage Equipment Division) have opened a new western area sales and service depot in Bridge Road, off Station Road, Kingswood, Bristol (telephone: Bristol 65-5814). The manager of this new depot is Mr. F. A. Thiel and the depot is scheduled to serve Hampshire, Dorset, Isle of Wight, Channel Isles, Wiltshire, Gloucestershire, Somerset, Devon, Cornwall, South and West Wales, and Eire. It is anticipated by the company that new or enlarged premises will be operating in London and Glasgow during this year.

● Denton Edwards Paints Ltd., of Abbey Road, Barking, Essex, have acquired the whole of the shares of Amalgamated Paints (London) Ltd. The board of the latter company now consists of Mr. P. Edwards (chairman), Mr. D. P. Sullivan (managing director), Mr. B. Edwards, Mr. D. Roe and Mr. I. Abrahams. The company will continue to operate under its own name and all communications should be addressed to Abbey Road, Barking, Essex (telephone: Rippleway 3871).

● J. R. Gordon & Co. Ltd., of Manchester, have made fresh marketing arrangements for their P.D. insulation board products. All areas other than the County of London are now being dealt with by Powell Duffryn Timber Industries Ltd., of

Queensferry, Chester (telephone: Hawarden 2001). All sales for the County of London will continue to be dealt with by Learys' Fibreboards Ltd., King William Street House, Arthur Street, London, E.C.2. (telephone: Mincing Lane 2424).

● Mr. R. E. Landsbert has been appointed a director of Marryat & Scott Ltd. and Marryat & Place Ltd.

● Cellon Ltd. have expanded their paint application laboratory at Kingston works by the installation of new equipment at a cost of over £15,000.

● Dudley Turner & Vincent Ltd. have moved to a new address at Boston House, 36-38 Fitzroy Square, London W.1 (telephone: Langham 6494).

● Bambergers Ltd., of 27/28 Finsbury Square, London, E.C.2, have acquired the share capital of Richard H. Keeping Ltd., timber importers and merchants. Keepings will continue to operate under their own name and to specialize in importing teak and other valuable hardwoods. They will at the same time be able to offer stocks of softwoods, plywood, chipboard and veneers.

● Broads Manufacturing Co. Ltd. have designed a special mobile unit

for the purpose of demonstrating the use of their Pakbrik equipment designed by the Building Research Station for use in the handling of packaged bricks. The unit will be visiting London, Lincoln, Lancashire, Yorkshire, Durham, Derbyshire, Nottingham and the West Country, and is fully committed until the end of April. The company will, however, be pleased to receive requests for demonstrations beginning in May, and such requests should be sent to their head office at 4 South Wharf, Paddington, London, W.2.

● Bilston Foundries Ltd. have commenced delivery of an order for 1,000 baths to Butlins Holiday Camp at Bognor Regis, Sussex.

● Mr. K. A. Fillmore has been appointed divisional sales manager at the Leigh Works of British Insulated Callender's Cables Ltd.

● The Midlands regional office of the Timber Development Association is now situated at 55 Pershore Street, Birmingham, 5 (telephone: Midland 1079).

● The directors of The George Cohen 600 Group Ltd. have declared an interim dividend of 4½ per cent, less tax, on their ordinary stock in respect of the financial year ending March 31, 1960.

● C. F. Anderson & Son Ltd., timber and wallboard importers, have bought the famous Collins Music Hall in Islington, London. With the approval of the L.C.C., the newly acquired premises will become a timber store and it is probable that the remainder will be fitted as offices.

● The J. I. Case Co. Ltd., the British subsidiary of J. I. Case Co. (of U.S.A.), have appointed Mr. George H. Fryer and Mr. Ingwald Kraft to be their service manager and London area manager respectively.

● The United Steel Companies Ltd. show a consolidated surplus after taxation for the year ended September 30, 1959, of £8,544,000, compared with the 1958 result of £8,128,000.

● Mr. W. Pigdon, general manager of the Wells factory of E.M.I. Electronics Ltd., is leaving shortly to take up a new appointment as executive vice-president of E.M.I.—Cossor Electronics Ltd. in Halifax, Nova Scotia, Canada. Mr. Pigdon's duties at Wells are being taken over by Mr. Edward Bagley as joint executive responsible to the deputy managing director, Mr. P. A. Allaway.

● The policy of centralization of the offices of the Gliksten Group of Companies is further implemented by the transference of Merediths Ltd. to Carpenters Road, Stratford, London, E.15 (telephone: Amherst 3300).

*J. & E. Hall Ltd. of Dartford have installed escalators, lifts and refrigeration equipment aboard the new Royal Mail M.V. "Amazon". It is the first British passenger liner to be installed with escalators. Four are fitted for service between galley and dining saloons*



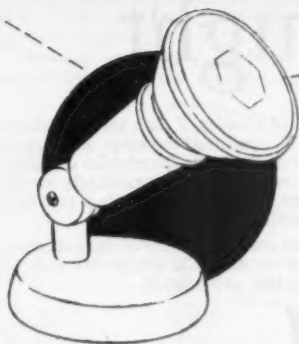
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are Nature's own supreme protection for the home of man against the vagaries of time and weather. Quarried from the ruggedly beautiful Westmorland Mountains near Conistone—the land that Ruskin knew and immortalised—these famous slates and stone are renowned for their extreme durability and the colourful picturesqueness of their Light Sea Green, Olive Green and Mixed hues.

**SPECIFICATION.** The roof to be covered with Broughton Moor Light Sea Green Best Quality (coarse grained) Westmorland Slates, to be obtained from the Broughton Moor Green Slate Quarries, Ltd., Conistone, The Lake District, Lancs., in random sizes about 18" to 9" long, proportionate and random widths, laid to a 3" lap in regularly diminishing courses from eaves to ridge. Each slate to be securely fixed by two stout copper nails, and wide slates are to be used on the hips and verges. **Alternatives:** Seconds, Thirds, Special Peggies; Olive Green and Mixed Shades. **Ridging:** "Broom" purpose-made of crushed and moulded slate from the same veins is recommended.

### TECHNICAL INFORMATION CONCERNING BROUGHTON MOOR WESTMORLAND GREEN SLATES

QUALITY	LENGTH (Random widths)	COMPUTED COVER in. sq yds. per ton (3" lap)	APPROX. WEIGHT Per square (3" lap)—cwt.
BESTS ...	from 18" to 9"	24	9
SECONDS ...	from 18" to 9"	20	10½
THIRDS ...	from 18" to 12"	18	12
SPECIAL PEGGIES ...	from 15" to 7"	22	9½
SECOND PEGGIES ...	from 10" to 7"	20	11

Samples and prices gladly sent. Immediate Delivery.

BROUGHTON MOOR LIGHT SEA GREEN AND OLIVE GREEN STONE remains sound for centuries and is eminently suitable for external and internal Facings, Foundation Stones, Paving and Flooring, Steps, Cills, Shop Fronts, Surrounds, Pilasters, Fireplaces and all architectural work.

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2. Facings.
3. Coping.
4. Cills.
5. Riven Face Slabs.

## THE BROUGHTON MOOR GREEN SLATE QUARRIES

Conistone, Lancashire LTD.

Telephone: Conistone 225/6

Telegrams: Cann, Conistone

**STANDARD DOUBLE HUNG WOOD WINDOWS**

For best frames, see the south window and the north window. The south window is 14" wide and the north window is 14" wide.

Chamberlin is a house in an ordinary residence. Chamberlin is a house in an ordinary residence. Chamberlin is a house in an ordinary residence.

**GENERAL SPECIFICATIONS**

All double hung wood windows shall be supplied with Chamberlin draught-excluding strips (see also or latest type No. 100, in standard in accordance with the specifications of, and be consistent with the drawings of, the Chamberlin Company of Britain).

**CHAMBERLIN**

SCALE: 1" = 1' 0"

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to help you  
plan  
without a  
draught

Here is just one of a series of data sheets available to you. With fully dimensioned drawings and sections illustrating the full range of Chamberlin draught-excluding equipment, you can immediately identify your requirement and as quickly make it part of your anti-draught planning.

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with equipment, technical advice  
and skilled installation craftsmen

CHAMBERLIN WEATHERSTRIPS LTD., 34 Elm Road, Chessington, Surrey.

Telephone: Lower Hook 1181 (3 lines)

## NEW PRODUCTS

In this feature are reviewed new lines introduced to the building industry for the first time and additions or improvements to existing ones. Any advantages claimed for a product are from information supplied by the manufacturer

### Parkray Room Heaters Modified

The Parkray 30 (inset) and 32 (free-standing), solid fuel closeable stoves, are now being equipped with heat-resisting clear glass doors. Advantages claimed for the new type over the mica panelled doors are that they are able to withstand greater thermal stress and strain; give a clear view of the fire; eliminate the need for cross-members in the door; and are not liable to sooting up. The glass doors consist of vertical strips, in order to prevent thermal strain at the centre from being communicated to the edges. In this way, the temperature at the centre of the doors is localized. Retail prices of these stoves are from £23 12s 6d and £27 17s 6d, respectively, including steel ashpan and operating tool. Both are still available with mica doors at £1 less. A set of six matched glass strips (per door), costs 12s. The company has, in addition, introduced a new Parkray model 30/22, which will fit into a fireplace with overhanging frieze or lintel, approximately 22in in height. This model is available with glass doors at the same price as the Parkray 30.

Radiation Group Sales Ltd., 255 North Circular Road, London, N.W.10.

Readers' Information Service, Ref. A. Date 23/3/60.

★

### New Partitioning (B)

This maker of wooden partitioning has now produced a single skin partition with special preformed ducting for electrical cables. This special ducting, being built-in before erection, enables electrical installations

and connections to be installed or altered in completed partitioning. By this method the partitioning is first erected and the electricians can carry on with their installations without further hindrance or waiting for partitioning sections to be put in place. Power or lighting cables can be run through ducting at either the top or bottom of the partitioning. In the former case a special cut-out is provided in the top rail and in the latter a special cable run is set into the floor rail. Where vertical wiring is required special twin panel sections are provided which incorporate a vertical wiring run from which leads can be taken at any required point. In appearance, the new partitioning is similar to the standard Clifford partitioning and our diagram shows how wiring work can be carried out.

The Clifford Partitioning Co. Ltd., 240 Burlington Road, New Malden, Surrey.

Readers' Information Service, Ref. B. Date 23/3/60.

★

### Expansion Jointing

Tretol Ltd. have joined forces with Servisised Products Corporation of Chicago, in order to manufacture Servisised expansion jointing products in this country. Products which will be manufactured include Kork-Pak, a preformed joint filler available in a wide variety of thicknesses up to one inch. It is claimed to possess powers of recovery which show a maximum loss of only 3 per cent of its weight after compression. Another new product which will be of interest to civil engineers is a split type rubber water stop which has already been successfully used in the U.S.A. An



D

advantage claimed for this waterstop is that it reduces the need for complicated split form work and thus cuts down installation costs. Para-Plastic 41 and 44 sealing compounds are stated to possess such a high standard of adhesion that primers can be completely eliminated. Para-Plastic 41 is stated to conform to American Federal Specification SS-S-164(I) whilst at the same time meeting the penetration requirements of B.S. 2499. The company formed as a result of this amalgamation provides a technical advice service on all types of expansion jointing problems and full information and literature are available from 2 Caxton Street, Victoria, London, S.W.1. Abbey 1024.

Tretol-Servisised Ltd., Tretol House, The Hyde, London, N.W.9. Colindale 7223.

Readers' Information Service, Ref. C. Date 23/3/60.

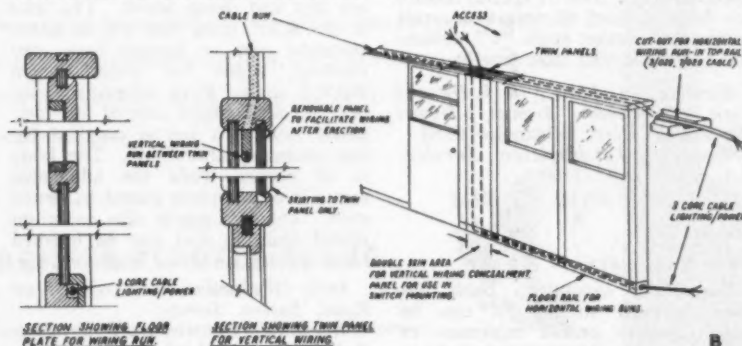
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### Bathroom Ceiling Switches (D)

A new addition to the MK range of switches is a 15 amp double pole ceiling switch specially designed for the control of bathroom fires. It is available either with or without neon pilot lamp (200/250V) and moulded red lens. The fittings have a base diameter of 2in and are supplied with fixing holes at 1½in centres. They fit on 3½in dia mounting blocks (List No. 2051) and are made in accordance with B.S. 2652: 1955. Similar designs are to be made with square plates for mounting in the flush B.S. 1363 box. Prices: with pilot lamp (List No. 3154), 12s 6d (brown), 13s 4d (ivory); without pilot lamp (List No. 3151), 7s 6d (brown), 8s 4d (ivory); No. 2051 mounting blocks cost 1s (brown) and 1s 2d (ivory).

MK Electric Ltd., Wakefield Street, London N.18. Edmonton 5151.

Readers' Information Service, Ref. D. Date 23/3/60.



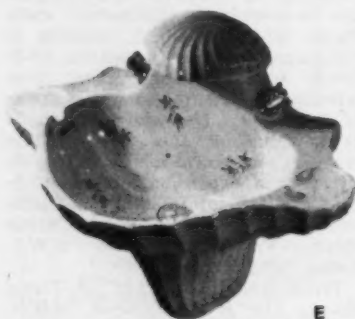
B

## NEW PRODUCTS

(continued)

### New Lavatory Basin (E)

The Shell lavatory basin is the latest addition to the Swanlyne range of sanitary appliances. It is of a most unusual shape and is manufactured in vitreous china. The Shell set comprises three pieces which cannot be supplied separately. These are a bowl which is supported on standard wall hangers, a top inverted shell which is bolted on before the basin is fixed and a lower plumbing cover. The lower plumbing cover does not support the basin but is, in fact, fixed below the basin after it has been installed. It is open at the base so that, where essential, the waste pipe and supply pipes can be brought up through this space. Two screw-down valves are connected with twin  $\frac{1}{2}$ in supply nozzles which deliver water



E

from below the upper shell. The waste is a  $1\frac{1}{2}$ in Leanit type, with no chain. The design is at present stocked in soft pink blending into grey, and soft turquoise blending into grey. Both of these are available either in the plain colour or decorated. Overall measurements,  $25\frac{1}{2}$ in by  $16\frac{1}{2}$ in by 24in high. Price: all white £25; standard single colours £30; decorated on white £33; shaded colours with plain colour bowl £36; shaded colours with decorated white bowl £39 10s.

Alfred Goslett & Co. Ltd., Charing Cross Road, London, W.C.2.

Readers' Information Service, Ref. E. Date 23/3/60.

★

### Plastic Shuttering (F)

This company has developed plastic shuttering, formed from 0.040in thick high impact polystyrene sheet, in various patterns which provide three-dimensional effects to concrete facings and other surfaces. The shuttering is produced in sheets measuring approximately 35in by 22in and they usually have a gloss surface on one side and a satin matt finish on the reverse. In

order to produce the effects of surfaces required, the sheets are abutted and taped on the reverse side with a waterproof self-adhesive Vinyl tape and supported by conventional wood or metal facings. After the concrete has been vibrated and set, the sheets can be released from the completed facings by a stripping action and no release agents are required for this purpose. Hair lines that may be caused by joints can be wet rubbed down. The sheets have been tested at the Building Research Station where it was noted that the semi-gloss finish obtained on the set concrete is retained on interior work whilst exterior facings weather down after a period of six months to a fine matt finish. It is claimed that the sheets may be re-used as many as 12 times if desired. The five different patterns produced are an overall rectangular pattern with 1in by 1in squares, an overall rectangular pattern with 1in by  $\frac{1}{2}$ in rectangles, an overall square tiled pattern 4in by 4in, an overall domed pattern and a brickwork pattern with the brick size of  $8\frac{1}{2}$ in by 2 $\frac{1}{2}$ in. Cost per sheet varies between 15s and 25s according to the quantity ordered.

Omega Plastics Ltd., Highbridge Road, Barking, Essex.

Readers' Information Service, Ref. F. Date 23/3/60.

★

### New Fixing Tools (G)

The Bossong cartridge hammer, guns and hand tools, which are of continental origin, are now to be manufactured in this country. The Bossong cartridge-firing gun will fix such materials as timber and metals by means of bolts, nails and screws of varying lengths, to concrete, steel, brickwork and breeze blocks, with a minimum of effort. In addition, Whitworth screw-headed studs can be used for proud fixings. The bolts and nails can be fired directly into the basic materials and in all cases the accessories are permanently fixed into the groundwork. The gun is fully automatic and cartridge ejecting whether loaded or spent, and does not require a licence to operate. The gun is simple to operate and accessories are interchangeable with the hand-operated fixing tool. A special muzzle has been devised to ensure accurate fixings into slotted angle "T" sections and narrow-slotted steel lengths.

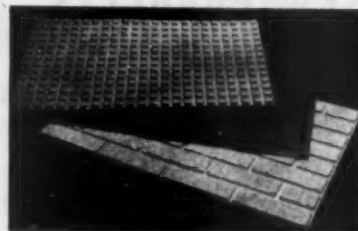
Bossong Co. Ltd., 3 & 4 Duxons Turn, Maylands Avenue, Hemel Hempstead, Herts. Boxmoor 6850.

Readers' Information Service, Ref. G. Date 23/3/60.

★

### New Executive's Chair

The T.T.I. executive's chair has been designed so that it can be folded quickly into a minimum of space. It is flexible and very light in



F



G

weight. The arms and back are padded with foam plastic and this is covered with Duracour, a fire resistant covering recently developed by Courtaulds Ltd. This covering is claimed to be unaffected by sunlight as well as being non-stain, and moth, rot and damp proof. It can be sponged down when necessary. The framework is of tubular steel and the chair is available either in claret, lime or turquoise blue. Price £5 13s 6d.

Tool Treatments (Chemicals) Ltd., Colliery Road, Birmingham Road, West Bromwich, Staffs.

Readers' Information Service, Ref. H. Date 23/3/60.

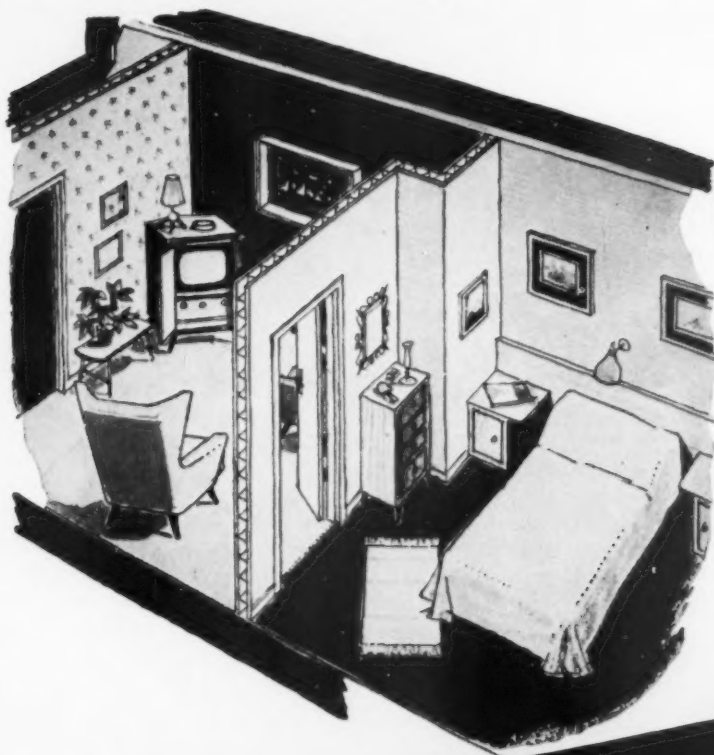
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### Oil-feed Indicator

The Suba Model 109 oil-feed indicator is a small and very compact unit. It measures 4in high by  $1\frac{1}{2}$ in in dia. and can be fitted into confined spaces, whilst at the same time it is capable of giving a very clear indication of the oil flow. The oil feed can be adjusted by means of a fine thread controlled from 3 g.p.m. to complete cut off whilst the system is still running and will handle pressures up to 125lb p.s.i. The flow is observed through Perspex windows which are sealed at both ends and are dirt and damp proof. The inlet is  $\frac{1}{2}$ in B.S.P. male and will fit either standard pipe or flexible hose connections, whilst the outlet is  $\frac{1}{2}$ in B.S.P.T. male. Flow adjustment cannot be accidentally altered or tampered with as a key is supplied for any necessary alterations. The body is of bronze while the adjustable screw is of cadmium plated hardened steel. The lock-nut is also cadmium plated and the unit can be finished either in dull nickel or black wrinkle.

Suba Hydraulics Ltd., 86 Lind Road, Sutton, Surrey.

Readers' Information Service, Ref. I. Date 23/3/60.



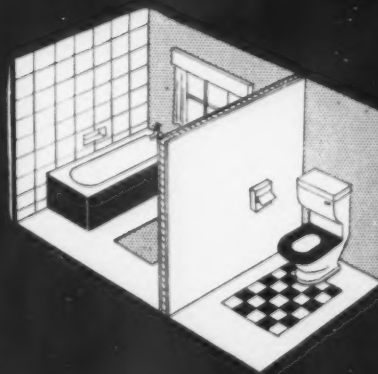
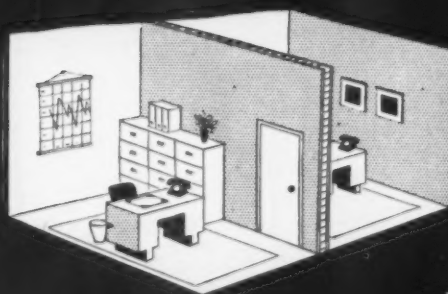
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Ideal for inner linings to external walls, internal walls and partitions, Paramount Dry Partition is strong, rigid, easy-to-cut and handle. Light in weight, highly fire-resistant it has good sound and thermal insulating properties. Being a 'dry' product, it is ready for immediate decoration and saves hours of on-site labour. The accompanying illustrations give an idea of the impressive range of uses for this outstanding wall unit. Off-cuts have the same strength as the original panel and can be used for constructing built-in wardrobes, airing and meter cupboards etc. For full details about all Blue Hawk DRY CONSTRUCTION materials apply to:

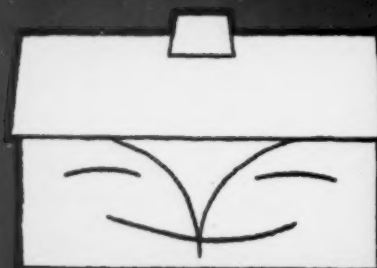
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**BRITISH PLASTER BOARD**  
 (MANUFACTURING) LTD.

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in this house will  
not be attacked by  
ROT or INSECTS

As an optional extra the joists, flooring and roofing timbers in these houses can be vacuum/pressure impregnated with 'Tanalised' C preservative before installation. The treatment is clean and odourless and gives full protection against fungal decay (dry rot and wet rot) and damage by insect grubs (woodworm, longhorn, etc.)

HICKSON'S TIMBER IMPREGNATION CO. (G.B.) LTD.  
Castleford, Yorkshire, Tel. Castleford 388



sell more houses with

**'Tanalised' Timber**

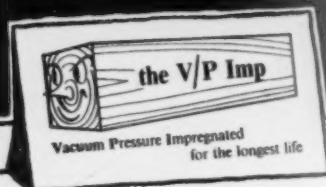
May we quote the small extra cost of using 'Tanalised' timber in your houses? Treatment plants are situated at 38 strategic points and most of them are in timber merchants' yards.

**HICKSON'S TIMBER IMPREGNATION CO. (G.B.) LTD.**

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# INTRODUCING

## new TYPE 6

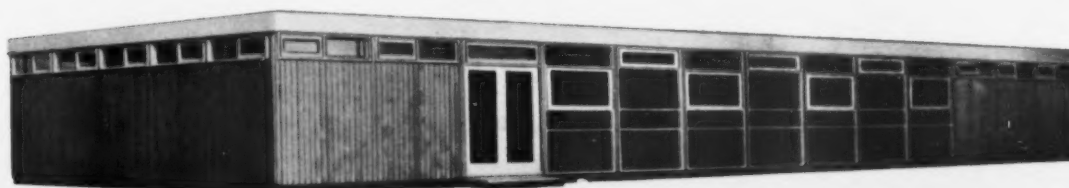
*TYPE SIX now offers a new vertical module, completely new panel range, and a choice of ceiling heights, with changes of roof levels suitable for the smaller type of scheme where cost is critical and our DERWENT system of construction too elaborate.*

*New TYPE SIX is designed to increase the flexibility and introduce current architectural design trends, whilst retaining the basic economic features and quality of the now well known earlier system.*

*The system now permits the design of many types of building, including small schools, individual classrooms, community centres, village halls, offices, pavilions and dormitories.*

*An essential part of TYPE SIX is the co-operation and product quality always associated with Vic Hallam Limited.*

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Timber Buildings Division

LANGLEY MILL - NOTTINGHAM

# SNOWCRETE

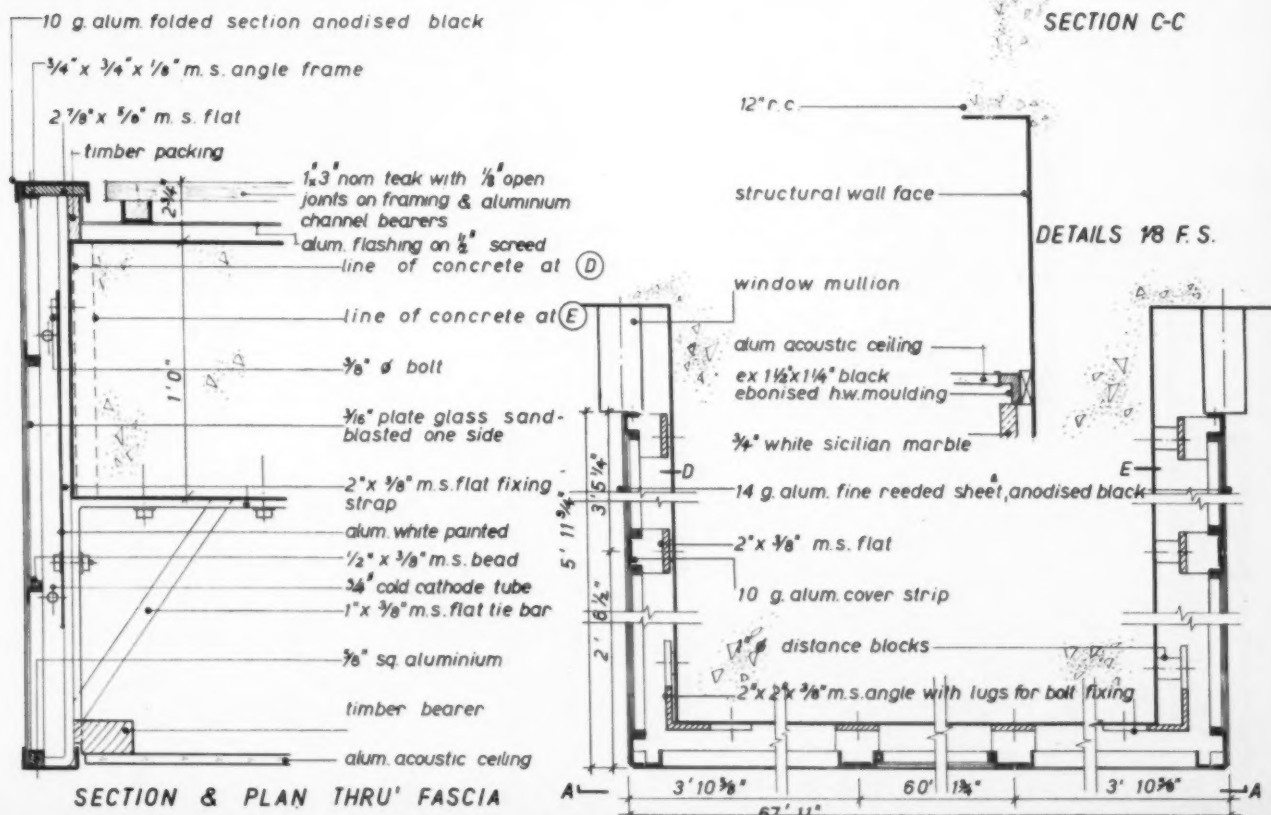
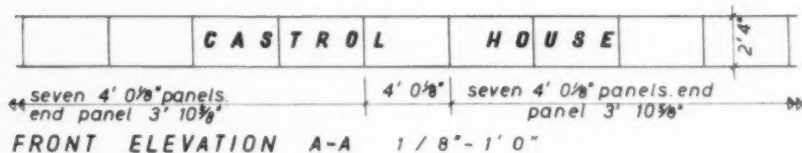
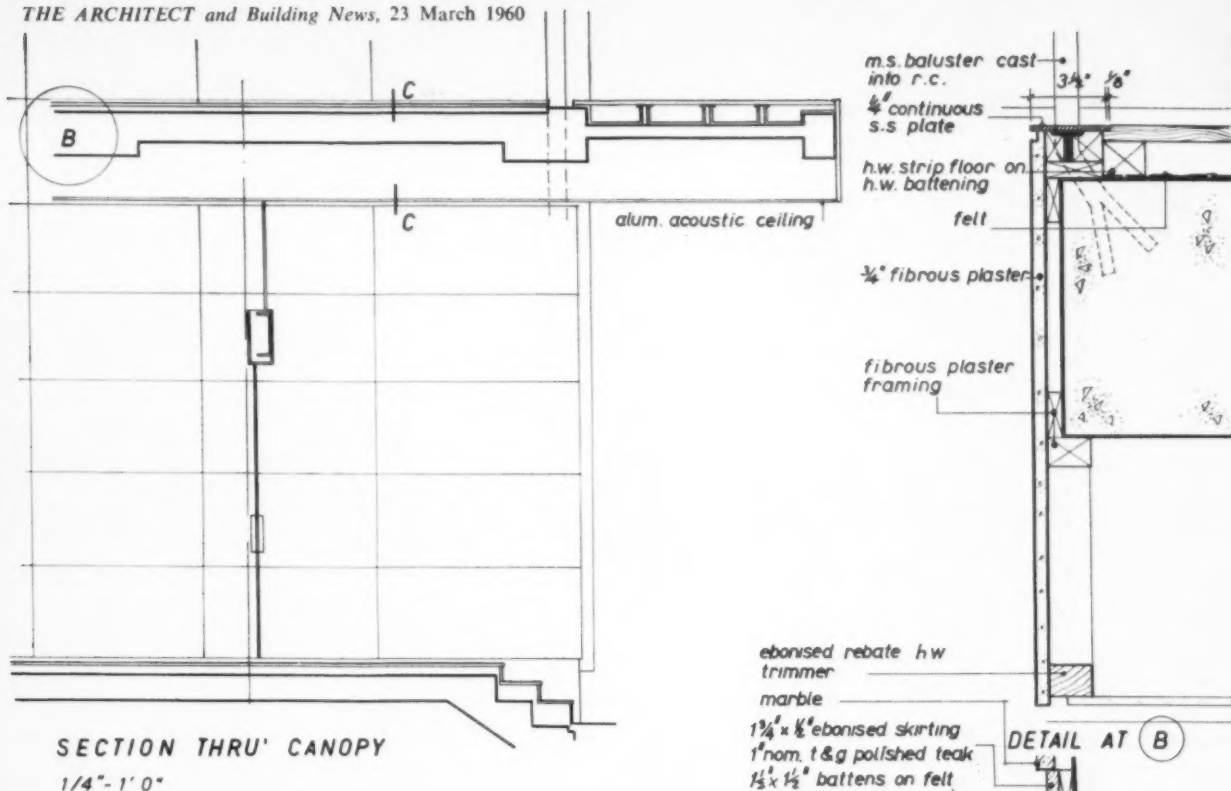


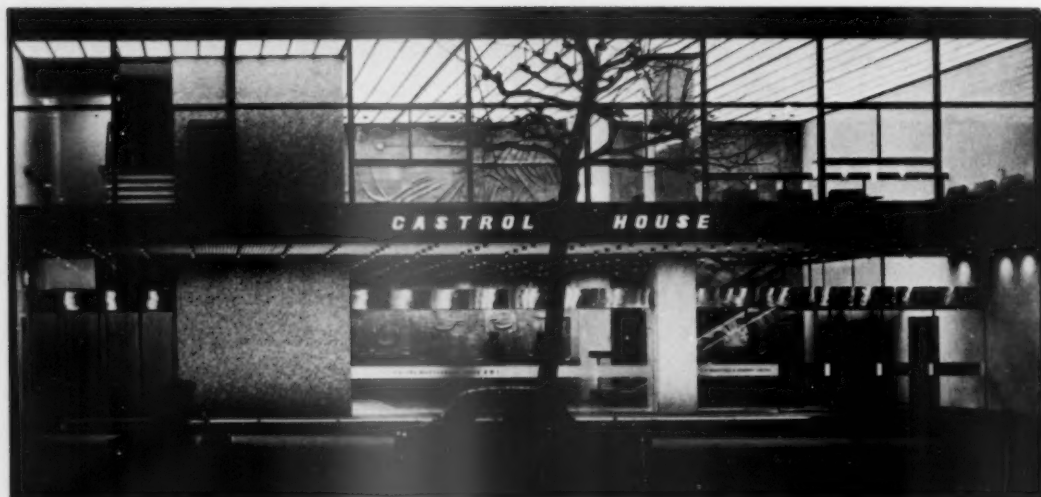
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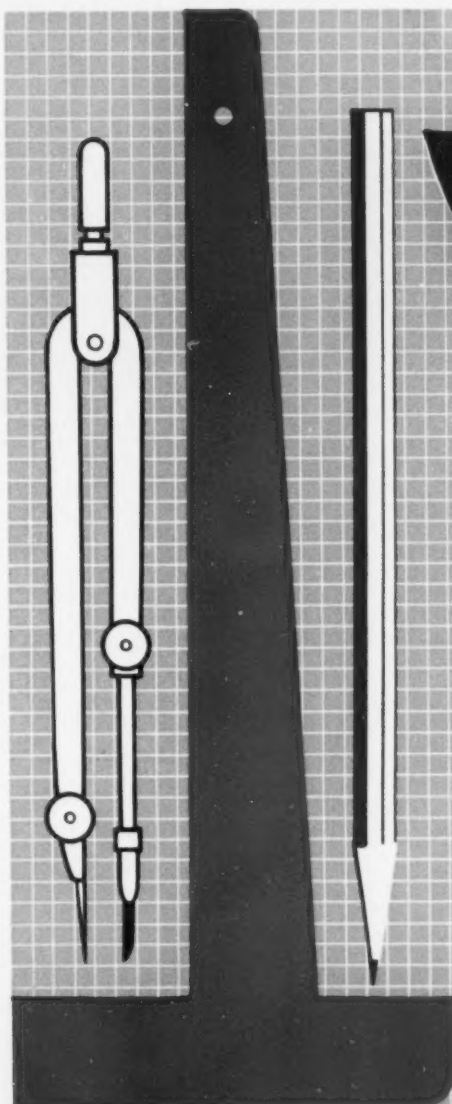
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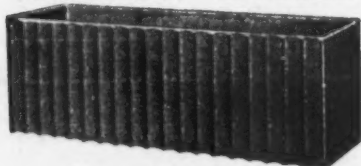
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Notes below give basic data of contracts open under locality and authority which are in a bold type. References indicate: (a) type of work (b) address for application. Where no town is stated in the

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# CONTRACT • NEWS •

## OPEN BUILDING

**BARNSELY B.C.** (a) Erection and completion of traditional houses (14 dwellings infilling, Athersley North and South estates) and 76 dwellings adjoining "The Limes", Gawber Road as follows: 39 pairs of one-bedroom bungalows, eight one-bedroom bungalows in blocks of four, two pairs of three-bedroom houses. (b) Borough Engineer, Town Hall. (c) 2gn. (e) March 29.

**BELFAST C.C.** (a) Erection of two tower blocks of flats, each 13 storeys in height on the North Queen Street development, Victoria Barracks. The full scheme will ultimately include further similar tower blocks in addition to eight and four-storey slab blocks of maisonnettes and traditional houses. (b) Town Clerk, P.O. Box 234, City Hall. (d) March 28.

**BINGHAM B.C.** (a) Erection of two shops and two flats at Bingham. Two shops and two flats at Keyworth. (b) William Saunders & Partners, 24 Castle Gate, Newark-on-Trent. (c) 3gn. (e) March 31.

**BOLTON B.C.** (a) Erection of 24 dwellings on School Hill redevelopment area, being one five-storey block. (b) Housing Department. (c) 2gn. (e) April 6.

**BOOTLE B.C.** (a) Additions and alterations to the County School for Girls, Breeze Hill. (b) Borough Surveyor, Town Hall, 20. (c) 2gn. (e) March 25.

**BRADFORD C.C.** (a) Erection of 89 dwellings at Holme Wood estate. (b) City Engineer and Surveyor Town Hall. (c) 2gn. (e) April 4.

**BRIGHTON B.C.** (a) Fixed-price tenders for erection of the first stage of the College of Arts and Crafts. (b) Borough Surveyor Engineer and Planning Officer, 26-30 Kings Road, Brighton. (c) 3gn. (e) April 12.

**BROWNHILLS U.C.** (a) Erection of 18 houses High Street, Clayhanger. (b) Charles H. Hunt, Esq., Engineer and Surveyor, Coombe House, Brownhills, Staffs. (c) 2 gn. (e) March 28.

**CARDIGANSHIRE C.C.** (a) Erection of a county primary school at Commis-coch, near Aberystwyth. (b) County Architect, County Hall, Aberyron. (c) 2gn. (e) April 4.

address it is the same as the locality given in the heading (c) deposit (d) last date of application (e) last date and time for submission of tenders. Full details of contracts marked \* are given in the advertisement section.

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**CARMARTHEN R.C.** (a) Erection of four three-bedroom houses at Len-y-Prior, St. Clears. (b) Surveyor, 3 Spilman Street. (c) £1. (e) March 30.

**CHESTER C.C.** (a) Erection of a shop, flat and kiosks at George Street. (b) City Engineer and Surveyor, 49 Northgate Street. (e) April 9.

**CHESTER C.C.** (a) Erection of 110 houses and flats and 20 lock-up garages on Plas Newton estate. (b) City Engineer and Surveyor, 49 Northgate Street. (e) April 4.

**CUMBERLAND C.C.** (a) (1) Erection of additional classroom and staff room at Gilsland School. (2) Extensions, etc., at High Kesket C. of E. School. (3) Erection of a rural police station at Kirkeswald. (4) Erection of two pairs of police houses at Whinlatter Road. (b) County Architect, 15 Portland Square, Carlisle. (e) March 29.

**DERBYSHIRE C.C.** (a) Erection of a pre-cast concrete garage block 73ft long by 30ft wide, and drainage works at Mansfield Road, Hillstown. (b) County Surveyor, County Offices, Matlock. (e) March 28.

**GLASGOW C.C.** (a) Extension of Our Lady and St. Francis School, Charlotte Street, C.I. (b) City Architect and Planning Officer, 20 Trongate, Glasgow, C.I. (d) Immediately.

**GODSTONE R.D.** (a) Erection of four blocks of 12 units total, all in two storeys, at South Nutfield, Surrey. (b) Engineer and Surveyor, Council Offices, Oxted. (c) 2gn. (e) April 6.

**GREAT HARWOOD U.C.** (a) Erection of seven blocks of four flats. (b) Grimshaw and Townsend, 24 Willow Street, Accrington. (c) 2gn. (d) Immediately.

**GREENWICH B.C.** (a) Erection of a cleansing station and improvements and extensions to existing workshop, garage and welfare buildings, all at the Council's Tunnel Avenue depot. (b) Borough Engineer and Surveyor, Town Hall, S.E.10. (d) March 24.

**HAVANT AND WATERLOO U.C.** (a) Fixed-price tenders for erection of 20 aged persons' flats at Forest End, Waterlooville. (b) Engineer and Surveyor, Park Road North, Havant. (e) April 2.

**HAZEL GROVE AND BRAMHALL U.C.** (a) Construction of 40 brick garages. (b) Engineer and Surveyor, Council House, Hazel Grove. (c) 2gn. (e) March 29.

**HUNTS C.C.** (a) Erection of a four-bedroom family group home of traditional construction with load-bearing walls and concrete strip foundations. (b) County Architect, County Buildings, Huntingdon. (e) April 15.

**KNUTSFORD U.C.** (a) Conversion of the Marcliff Cinema into a public hall, consisting of alterations to main hall, provision of dance floor, additional toilets, interior decoration, lighting and general repairs. (b) Surveyor, Council Offices, Toft Road. (c) 2gn. (e) April 2.

**LEYLAND U.C.** (a) Contract 32. Erection of 22 pre-cast concrete bases and other ancillary works on Wade Hall estate. (b) Engineer and Surveyor, Council Offices. (c) 2gn. (e) March 29.

**MANCHESTER C.C.** (a) Design, detailing and construction of structural framework in reinforced concrete and steel, for a proposed occupation centre at Wythenshawe. (b) City Architect, P.O. Box 488, Town Hall, Manchester. (e) April 12.

**MANCHESTER C.C.** (a) Supply and erection of one heated timber greenhouse, 75ft by 18ft at Alexandra Park. (b) Director of Parks, Town Hall. (e) March 28.

**MANSFIELD B.C.** (a) Alterations and extensions to public library at Leeming Street. (b) E. T. Crowe, Esq., Borough Engineer and Surveyor, Carr Bank. (c) 2gn payable "Town Council of Mansfield". (e) March 31.

**MATLOCK U.C.** (a) Erection of five blocks of four Homeville one-bedroom flats at Church Road, Darley Dale. (b) Engineer and Surveyor, Mr. N. Chamberlain, Town Hall. (c) 3gn. (e) April 1.

**NESTON U.C.** (a) Erection of 50 dwellings on Clayhill housing estate, Liverpool Road. (b) Architect, Morton Place, Pwllchrochan Avenue, Colwyn Bay. (e) March 31.

**NEW SARUM C.C.** (a) Erection of 40 houses, 24 flats, 11 bungalows on Bishopsdown estate. (b) City Engineer, The Council House. (e) April 8.

**NEWTON ABBOT R.C.** (a) Erection of three pair of houses at Bovey Tracey, three houses and one bungalow at Ogwell and three bungalows at Denbury. (b) Clerk to the Council, Council Offices, Kingsteignton. (c) 2gn. (d) March 24.

**NORTHAMPTON R.C.** (a) Erection of 53 bungalows, 12 houses and three club-rooms as follows: Denton, 11; Great Houghton, 4; Little Houghton, 17; Harpole, 8; Kislingsbury, 12; Milton, 10; Rothersthorpe, 2. (b) R. J. Miller, Architect, 1 Cheyne Walk, Northampton. (c) 3gn. (e) April 13.

**READING B.C.** (a) Erection of 118 dwellings and 52 garages at Bulmershe estate, near Reading. (b) Borough Architect, Town Hall. (c) 2gn. (e) April 8.

**RINGWOOD AND FORDINGBRIDGE R.C.** (a) Alterations and additions to Public Offices, Ringwood. (b) Public Offices Ringwood. (c) 2gn. (e) March 31.

**RUGBY B.C.** (a) Construction of a paddling pool, shelter, pump house and refreshment kiosk in Rugby recreation ground. (b) Borough Surveyor, Burford House. (c) 2gn. (e) April 4.

**RUTLAND C.C.** (a) Erection of extensions to Uppingham Secondary School, consisting of a new hall/gymnasium, two classrooms, library, art room and workshop block with ancillary accommodation. (b) County Architect and Planning Officer, County Offices, Catmore, Oakham. (c) 2gn. (e) March 28.

**SAFFRON WALDEN R.C.** (a) Erection of four flats at Wimbish. (b) Clerk of the Council, Council Offices, Debden Road. (e) April 9.

**SELKIRK C.C.** (a) All separate trades for reconstruction of Knowe Park School. (b) I. & J. Hall, Ladhope Vale, Gala-shiels. (d) March 26.

**SEVENOAKS B.C.** (a) Erection of three pairs of three-bedroom houses, one block of four three-bedroom houses and two blocks of four ageing persons' flats on Crouch House Lane, Edenbridge. (b) Engineer and Surveyor, Inglewood, Oak Hill Road, Sevenoaks. (c) 2gn. (e) March 29.

**SOUTHBOROUGH U.C.** (a) Erection of 20 garages, Broomhill Park Road and construction of an access road. (b) Howes & Jackman, 1 Verulam Buildings, Gray's Inn, London, W.C.1. (c) 2gn. (e) April 4.

**SOUTHEND-ON-SEA B.C.** (a) Foundations and erection of prefabricated movable classrooms and incidental works at Wentworth High School for Girls. (b) Borough Architect, 30 Alexandra Street, Southend-on-Sea. (e) April 6.

**ST. HELENS B.C.** (a) Erection and completion of two-storey block of six flats in traditional construction at Forest Road and Feeney Street, Sutton Manor. (b) Borough Engineer, Town Hall. (c) 2gn. (e) April 12.

**STROOD R.C.** (a) Erection of four aged persons' flats at Upper Halling and six aged persons' flats at Grain. (b) Engineer and Surveyor, Council Offices, Frindsbury Hill, Strood, Kent. (c) 5gn. (e) April 4.

**THANET WATER BOARD.** (a) Modification of an alteration to the pump-house and auxiliary site works at Dane pumping station at Margate. (b) Engineer, 58 Victoria Road, Margate. (e) April 15.

**TUNBRIDGE WELLS R.D.C.** (a) Erection of 74 dwellings in the North Street Area. (b) Borough Surveyor and Waterworks Engineer, Town Hall. (c) 2gn. (e) About April 4.

**WARWICK B.C.** (a) Erection of 19 three-bedroom two-storey units, 12 one-storey one-bed sitting-room units, five one-storey one-bedroom units, together with laundry block, access road and nine brick garages, on site A, Percy estate Central Area. (b) Borough Engineer and Surveyor, 23 Jury Street. (c) 2gn. (e) April 15.

**WELSH JOINT EDUCATION COMMITTEE.** (a) Erection of a three-storey office block extension and alterations to existing buildings at 30 Cathedral Road, Cardiff. (b) T. Alwyn Lloyd & Gordon, architects, 6 Cathedral Road, Cardiff. Date for possession is end of April, 1960. Completion period of contract is 12 months. Approximate cost: £40,000-£45,000.

**WELWYN R.C.** (a) Erection of 16 traditional garages with tarmac forecourt at Queensway estate. (b) Surveyor, Council Offices, Welwyn, Herts. (c) 2gn. (e) April 6.

## PLACED

Notes on contracts placed state locality and authority in bold type with (1) type of work (2) site, (3) name of contractor and address, (4) amount of tender or estimate. † denotes that work may not start pending final acceptance, or obtaining of licence, or modification of tenders, etc.

**BIRMINGHAM.** (1) Construction of a passenger-handling building for the Ministry of Civil Aviation. (2) Elmdon Airport. (3) Wilson Lovatt & Sons Ltd., Clarence Street, Wolverhampton. (4) £176,000.

**BIRMINGHAM C.C.** (1) Erection of a four-storey block of maisonnettes, etc. (2) Edgbaston. (3) H. Edmunds & Sons Ltd., Brook Road, Oldbury, Birmingham. (4) £40,511.

**BRITISH TRANSPORT DOCKS.** (1) Construction of two single-storey transit sheds. (2) No. 12 Quay, King George Dock, Hull. (3) A. Monk & Co. Ltd., Padgate, Warrington.

**CARLISLE C.C.** (1) Erection of a crematorium. (3) Adams & Mortimer Ltd., Whitehorse Lane, Witham, Essex. (4) £30,776.

**DURHAM C.C.** (1) Erection of the Beds. Davy and Faraday Halls of the proposed campus school. (2) Billingham. (3) George Wimpey & Co. Ltd., Orchard House, Fenwick Terrace, Newcastle-upon-Tyne. (4) £639,462.

**DURHAM C.C.** (1) Erection of Lane House School. (2) Peterlee. (3) Milton Hindle Ltd., Peterlee, Co. Durham. (4) £140,000. (1) Erection of a day school. (2) Billingham-on-Tees. (3) J. W. Henderson & Co. (Stockton) Ltd., Church Road, Stockton-on-Tees. (4) £43,984. (1) Erection of a fire station. (2) Newton Aycliffe. (3) Wilsons, Coulson Street, Spennymoor, County Durham. (4) £12,626.

**EAST SUSSEX C.C.** (1) Erection of a fire station. (2) Haywards Heath. (3) Saunders (Contractors) Ltd., London Road, Burgess Hill, Sussex. (4) £36,480.

**EDINBURGH.** (1) Construction of an oil terminal for storage, etc., for the Regent Oil Co. (2) Granton Harbour. (3) James Laidlaw & Sons Ltd., Dalmarock Road, Rutherglen, Glasgow.

**FELLING U.C.** (1) Construction of swimming baths. (2) Leam Lane estate. (3) Site borings—George Wimpey & Co. Ltd., Orchard House, Newcastle upon Tyne. (4) Cost of scheme: £200,000. (1) Erection of 89 houses. (2) Leam Lane estate. (3) Direct labour. (4) £138,000.

**GUILDFORD.** (1) Erection of a nine-storey office block for Stockland Property Ltd. (3) Sir Robert McAlpine & Sons Ltd., 80 Park Lane, London, W.1.

**HULL C.C.** (1) Erection of 138 dwellings. (2) Nornabell Street. (3) F. Bilton Ltd., 87 Wincolmlee, Hull.

**LIVERPOOL C.C.** (1) Erection of 68 flats, etc. (2) Canterbury Street. (3) Direct labour. (4) £125,070.

**LIVERPOOL C.C.** (1) Erection of a gymnasium and kitchen. (2) Fazackerley Secondary School. (3) J. B. Johnson & Co. Ltd., 17 Overton Street, Liverpool. (4) £40,936. (1) Erection of communal laundry and baths. (2) St. Domingo Road. (3) Hale & Williams Ltd., 1 Heather Street, Liverpool. (4) £50,477. (1) Erection of a fire station. (2) Storrington Avenue, etc. (3) F. C. Bloomfield & Co. Ltd., 71 Almonds Green, Liverpool, 12. (4) £91,800. (1) Adaptations at Cottage Homes to provide training centre for mentally disordered. (3) J. & E. Aspinall Ltd., Signal Works Road, Liverpool. (4) £42,980.

**LONDON C.C.** (1) Erection of 168 flats. (2) Dacres Road, Lewisham. (3) Leslie & Co. Ltd., Peel Street, London, W.8. (4) £554,836.

**LONDON C.C.** (1) Civil engineering and building works for construction of a new pumping station. (2) Nine Elms Lane, Battersea, S.W. (3) Peter Lind & Co. Ltd., Romney House, Tufton Street, London, S.W.1. (4) £346,824 and £75,553, respectively.

**LONDON, W.** (1) Preparation of Marlborough House as an assembly for Commonwealth Prime Ministers. (2) London, W. (3) Higgs & Hill Ltd., Crown Works, South Lambeth Road, London, S.W.8. (4) £200,000.

**NEWCASTLE UPON TYNE C.C.** (1) Erection of the first part of the new Town Hall Scheme (City Treasurer's block). (2) Barras Bridge. (3) Sir Robert McAlpine & Sons (North Eastern) Ltd., 81 Jesmond Road, Newcastle upon Tyne. (4) £2 million.

**NORTH RIDING C.C.** (1) Erection of a primary school. (2) Marton-in-Cleveland. (3) A. Robinson (Contractors) Ltd., 423 Linthorpe Road, Middlesbrough. (4) £46,000.

**PLYMOUTH C.C.** (1) Erection of 24 flats. (2) King Street, etc. (3) Aubrey Long Ltd., 21 Harvey Street, Tor Point, Cornwall. (4) £33,492.

**PONTYPRIDD U.C.** (1) Erection of 52 flats. (3) Gregory Housing Ltd., 21 Farncombe Road, Worthing, Sussex.

**PORTSMOUTH C.C.** (1) Erection of 88 flats. (2) Nelson Road. (3) Howe & Bishop Ltd., Clarendon Road, Portsmouth. (4) £327,386.

**ROMFORD, ESSEX.** (1) Warehouse for Ind Coope Ltd. (3) Sir Robert McAlpine & Sons Ltd., 80 Park Lane, London, W.1. (4) £400,000.

**SUFFOLK.** (1) Erection of a bacon factory. (2) Little Watring. (3) W. & C. French Ltd., Buckhurst Hill, Essex. (4) £220,000.

**SUSSEX.** (1) Erection of a telephone exchange. (2) Three Bridges. (3) Rice & Son Ltd., Stephenson Way, Three Bridges, Sussex.

**WALTHAMSTOW B.C.** (1) Erection of 21 flats, 16 maisonnettes. (2) Avon Road, etc. (3) Seivad Ltd., 12 Southend Road, London, E.18. (4) £61,359.

**WARWICKSHIRE C.C.** (1) Erection of a fire station and brigade headquarters. (2) Leamington Spa. (3) W. H. Jones & Son Ltd., Lockhurst Lane, Coventry. (4) £136,676. (1) Erection of an old people's home. (2) Percy estate, Warwick. (3) W. H. Jones & Son Ltd., Coventry. (4) £55,304. (1) Erection of an old people's home. (2) Abbotts Farm estate, Rugby. (3) A. R. Lane Ltd., St. Patrick's Road, Coventry. (4) £54,385. (1) Erection of an ambulance depot. (2) Dordon. (3) C. Green & Sons Ltd., 132 Monument Road, Birmingham. (4) £20,691. (1) Erection of an ambulance depot. (2) Solihull. (3) Hunt & Pearcey Ltd., 34 Ulverley Green Road, Solihull. (4) £18,406. (1) First instalment of High School. (2) Wilnecote. (3) J. Parnell & Son Ltd., Oliver Street, Rugby.

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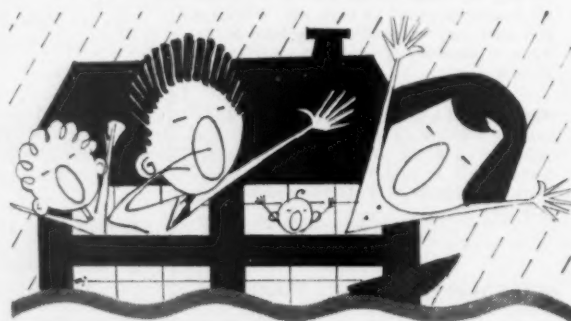
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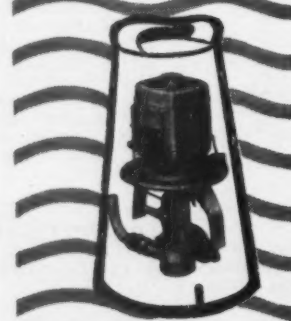


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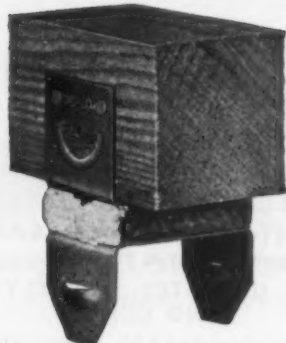


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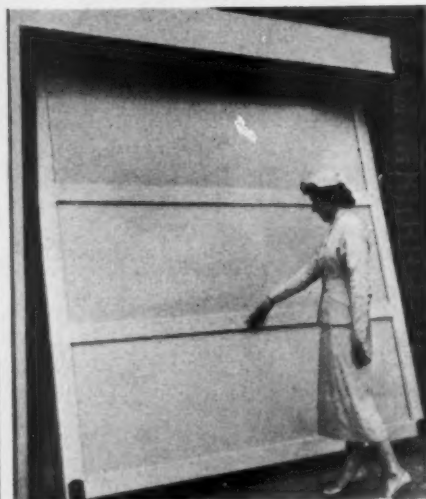
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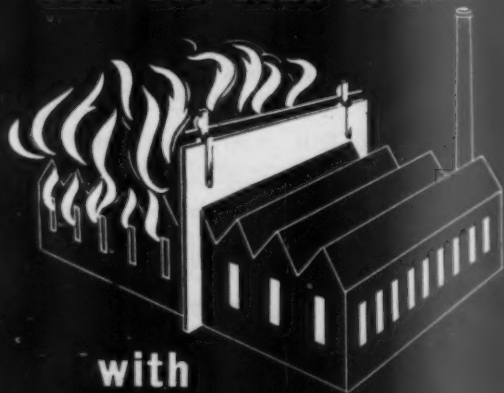
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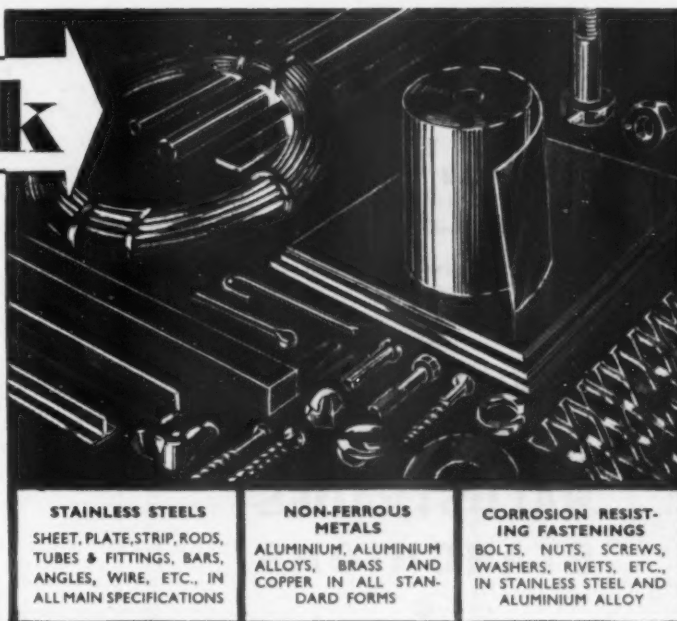
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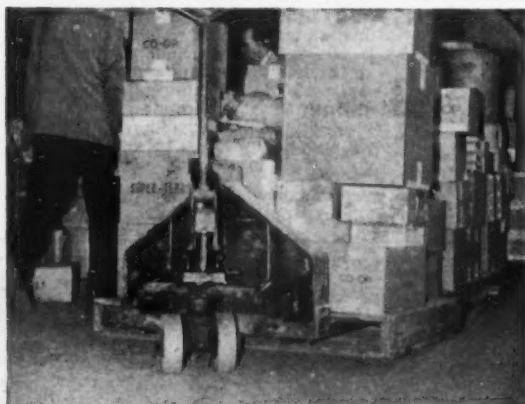
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# OFFICIAL ANNOUNCEMENTS

## APPOINTMENTS • CONTRACTS • TENDERS

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### APPOINTMENTS

#### Welsh Regional Hospital Board Architect's Department

APPLICATIONS are invited for the following posts:

(a) **Senior Assistant Quantity Surveyor.** Applicants must be Corporate Members of the Royal Institution of Quantity Surveyors. Salary: £1,050 x £30(3) x £35(3)—£1,245 (under review). Person appointed must have extensive professional experience in the preparation of Bills of Quantities and Final Accounts, Site Measurement and Valuation for Interim certificates on Architectural and Engineering projects.

(b) **Assistant Architect.** Applicants must be Registered Architects. Salary: £730 x £25(2) x £30(2) x £35(5) x £40(1)—£1,055 (under review). Age and experience can be taken into account in fixing the commencing salary. Person appointed must be well experienced in the preparation of 1/8 scale working drawings, details, specification, surveying, levelling and the supervision of contracts.

(c) **Architectural Assistant.** Applicants must possess the Intermediate Examination of the R.I.B.A. and have had good experience in general architectural practices. Salary: £545 at age 21 or over, x £20(3) x £25(4) x £30(2)—£765.

(d) **Draughtsman.** Applicants must have had suitable training and some technical experience in architectural drawing. Salary £445 at age 21 or over, x £25(2) x £30(3)—£660 (under review).

All posts are superannuable and terminable by one month's notice on either side. Applications stating age, experience, qualifications, present position and salary, together with the names of two referees, to the Secretary of the Board, Temple of Peace and Health, Cathays Park, Cardiff, within 14 days of the appearance of this advertisement. [6273]

#### London County Council ARCHITECTS

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**REQUIRED** for Housing, Schools, General and Special Works Divisions. Full and varied programme of new work including schools, multi-storey flats and town development. Starting salaries according to qualifications and experience. Particulars and application form from Hubert Bennett, F.R.I.B.A., Architect to Council, (EK/ABN/496/3), County Hall, S.E.1. [6264]

#### County Borough of Bury

APPLICATIONS invited for the following permanent appointments:

(a) **Chief Assistant Architect, APT V** (£1,220/£1,375).

(b) **Engineering Assistant, APT I or APT II** or Special Grade (£610/£765 or £765/£880 or £785/£1,070).

Commencing salaries according to qualifications and experience.

Applicants for appointment (a) should be experienced in the design and construction of large public buildings and should be professionally qualified.

Applicants for appointment (b) should be university graduates or final year students, who wish to commence their training under the scheme for the Training of Municipal Engineers, or assistants who have completed their training period.

Applications stating age, details of training, qualifications, experience, present and previous appointments and salary, together with the names and addresses of two referees, must reach me by April 4, 1960.

EDWARD S. SMITH,

Town Clerk.

Town Hall,

Bury.

March 7, 1960. [6261]

#### Royal Institute of British Architects

APPLICATIONS are invited for the post of Technical Information Officer.

The man or woman appointed will be required to implement the Council's decision to initiate a technical information service; to prepare and publish the first pilot series of R.I.B.A. technical notes and subsequently to establish a permanent publication service.

The appointment is particularly suited to the younger architect and the salary range is £1,250/£2,000 with annual increments of £50.

Applications should be made on forms available from the Secretary, R.I.B.A., 66 Portland Place, London, W.1, not later than Friday, April 29, 1960. [6288]

### APPOINTMENTS (cont)

#### D.S.I.R. Building Research Station, Garston, Watford, Herts

**REQUIRES** Building Technicians with H.N.D. and practical experience in building industry. Appointments in Assistant Experimental Officer Grade within salary range £492 (age 21)—£670 (at age 26 or over)—£830, or Experimental Officer Grade (£954/£1,166), depending on age and experience. Duties: Studies of site processes, building management and new forms of construction, and for encouraging application of research results by advisory work on building practice and by general liaison with industry. Forms from Ministry of Labour, Technical and Scientific Register (K), 26 King Street, London, S.W.1, quoting E.111/OA. [6291]

#### Borough of Bexley ARCHITECTURAL ASSISTANTS

APPLICATIONS are invited for this appointment in the Borough Engineer and Surveyor's Department. The salary is within Grade APT II (£765/£880 per annum) plus London Weighting. Preference will be given to suitably qualified candidates with experience of housing and school projects.

Form of application and conditions of appointment are obtainable from the Borough Engineer, West Lodge, Broadway, Bexleyheath, Kent, to whom completed applications must be returned by Monday, April 11, 1960.

The Council may be prepared to assist in the provision of housing accommodation. Canvassing will disqualify.

ARTHUR GOLDFINCH,

Town Clerk.

[6314]

#### Borough of Castleford

#### APPOINTMENT OF ASSISTANT ARCHITECT

**SALARY** Grade APT I (£610/£765). Commencing salary according to qualifications and experience; N.J.C. Service conditions; superannuable; terminable on one month's notice either side.

Applicants should have passed the Intermediate R.I.B.A. Examination or its equivalent at one of the recognized schools of architecture.

The successful applicant will be required to pass satisfactorily a medical examination.

If required housing accommodation will be provided for the successful married applicant.

Applications, on forms obtainable from me, to be returned by April 9, 1960.

Canvassing disqualifies.

ERNEST HUTCHINSON,

Town Clerk.

Town Hall,

Castleford.

[6311]

#### Wiltshire County Council

#### County Architect's Department

APPLICATIONS invited for Assistant Architects, Grade IV (£1,065/£1,220). Final examination of R.I.B.A. (or equivalent) essential; commencing salary according to qualifications and experience.

Applications to Clerk of the Council, County Hall, Trowbridge, by April 2, 1960, stating age, education, qualifications, training, experience and three referees. [6308]

#### Ashington Urban District Council

#### APPOINTMENT OF ARCHITECTURAL ASSISTANT

APPLICATIONS are invited for the appointment of an Architectural Assistant in the Engineer and Surveyor's Department at a salary in accordance with Grade III or Special Grade, according to qualifications and experience.

Applicants should be qualified and be members of the R.I.B.A., and should have had experience in the preparation of plans, specifications, etc., for architectural work undertaken by a local authority and in particular housing.

Applications on forms to be obtained from Martin Jamieson, Esq., F.I.Mun.E., Engineer and Surveyor, Council Offices, Ashington, and must be returned to him not later than Tuesday, April 5, 1960.

JOHN KENT,

Clerk of the Council.

Council Offices,

Ashington,

Northumberland.

[6306]

### APPOINTMENTS (cont)

#### D.S.I.R. Building Research Station, Garston, Watford Herts

**REQUIRES** Assistant Experimental Officer to work in technical services section as assistant to Station Architect. Qualifications: H.N.D. or H.N.C. in Building. Salary: (according to age) —£472 10s (age 20)—£670 (age 26 or over) —£830. Forms from Ministry of Labour, Technical and Scientific Register (K), 26 King Street, London, S.W.1, quoting E.110/OA. [6292]

#### Borough of Dartford

APPLICATIONS are invited for the appointment of Architectural Assistant. Salary: Special scale (£785/£1,070), and, in addition, a "plusage" rate of £20 or £30 (according to age) will be paid.

The successful applicant will hold a senior position and he should have passed the final examination of the R.I.B.A. The commencing salary will be in accordance with qualifications and experience.

Housing accommodation will be available.

Applications, stating age, qualifications, and experience, and the names of three referees, should be forwarded to the Borough Surveyor, The Bridge House, Dartford, by April 8, 1960.

THOMAS ARMSTRONG,

Town Clerk.

[6297]

#### County Borough of Bury

APPLICATIONS invited for position of Assistant Quantity Surveyor, Grade APT III (£880/£1,065) or Special Grade (£785/£1,070). Commencing salary according to qualifications and experience.

Applications, stating age, details of training, qualifications, present and previous appointments and experience, together with names and addresses of two referees, must reach me by April 4, 1960.

EDWARD S. SMITH,

Town Clerk.

Town Hall,

Bury.

March 14, 1960.

[6298]

#### Lanark County Council ARCHITECTURAL ASSISTANTS (Qualified—A.R.I.B.A.)

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The Solicitors: Messrs J. Garrard & Allen, High Street, Olney (215/6). [6263]

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**ARCHITECTURAL ASSISTANTS** required, intermediate standard, busy London and Reading offices. Good prospects. Apply Eric G. V. Hives & Sons, 46 Queen's Road, Reading. [6269]

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**ARCHITECTURAL ASSISTANTS** required of at least Intermediate standard. Varied and interesting work in progressive office. Salary commensurate with ability, experience and enthusiasm. Five-day week.—Apply in writing, stating age and experience, to Schweppes Ltd., Architect's Department, Eastbourne Terrace, London, W.2 [6307]

**ARCHITECT'S ASSISTANT** required by Consulting Engineer in the West End capable of working on his own on commercial and industrial buildings among engineers. Not necessarily qualified but up to similar standard. Excellent possibilities for right man. Salary range £750/£950 p.a. depending on capabilities.—Write box 7994. [6294]

**ARCHITECTURAL ASSISTANTS** required for busy office with interesting and varied work. Intermediate and Final R.I.B.A. standard. Salary £750/£950 p.a. Five-day week.—Apply in writing or telephone Covell & Matthews, 34 Sackville Street, London, W.1. REgent 2291. [6122]

**ARCHITECTURAL ASSISTANT** required by Merseyside firm of building and civil engineering contractors for interesting and varied work in their industrial building department. Candidates should be of Intermediate R.I.B.A. standard or equivalent, capable of making site surveys, preparing working drawings and specifications with minimum supervision and with a knowledge of reinforced concrete design. Please write stating age, experience and salary required.—Box 7992. [6296]

**ARCHITECT'S ASSISTANT** required of Inter/Final R.I.B.A. standard.—Apply B. Stevens & Partners, 49 Havelock Road, Hastings. [6301]

**ARCHITECTURAL ASSISTANT** of Intermediate Standard required for busy general practice. Write stating age, experience and salary required to Earp, Badger & Harrison, A/R.I.B.A., Guild Chambers, Scholars Lane, Stratford on Avon. [6270]

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**ASSISTANT** required in Architect's Office, Baker Street area. Interesting and varied work. Salary up to £900 depending on ability.—Write to Box 8039. [6302]

**BASIL SPENCE AND PARTNERS** require qualified and experienced Architects to fill positions of responsibility on a major building programme. Write to 48 Queen Anne Street, W.1, stating experience and salary required. [6228]

**BIRMINGHAM** office has vacancy for Senior Assistant. Busy practice specialising in hospital and school design. Alternate Saturday mornings. Holiday arrangements respected. Please write for interview, giving details of qualifications and experience.—Box 7993. [6293]

**CHIEF ASSISTANT** required May 1, to share Administration of Country Practice, Bedfordshire. Design and responsibility for varied and substantial schemes.—Please send particulars and requirements Box No. 8042. [6305]

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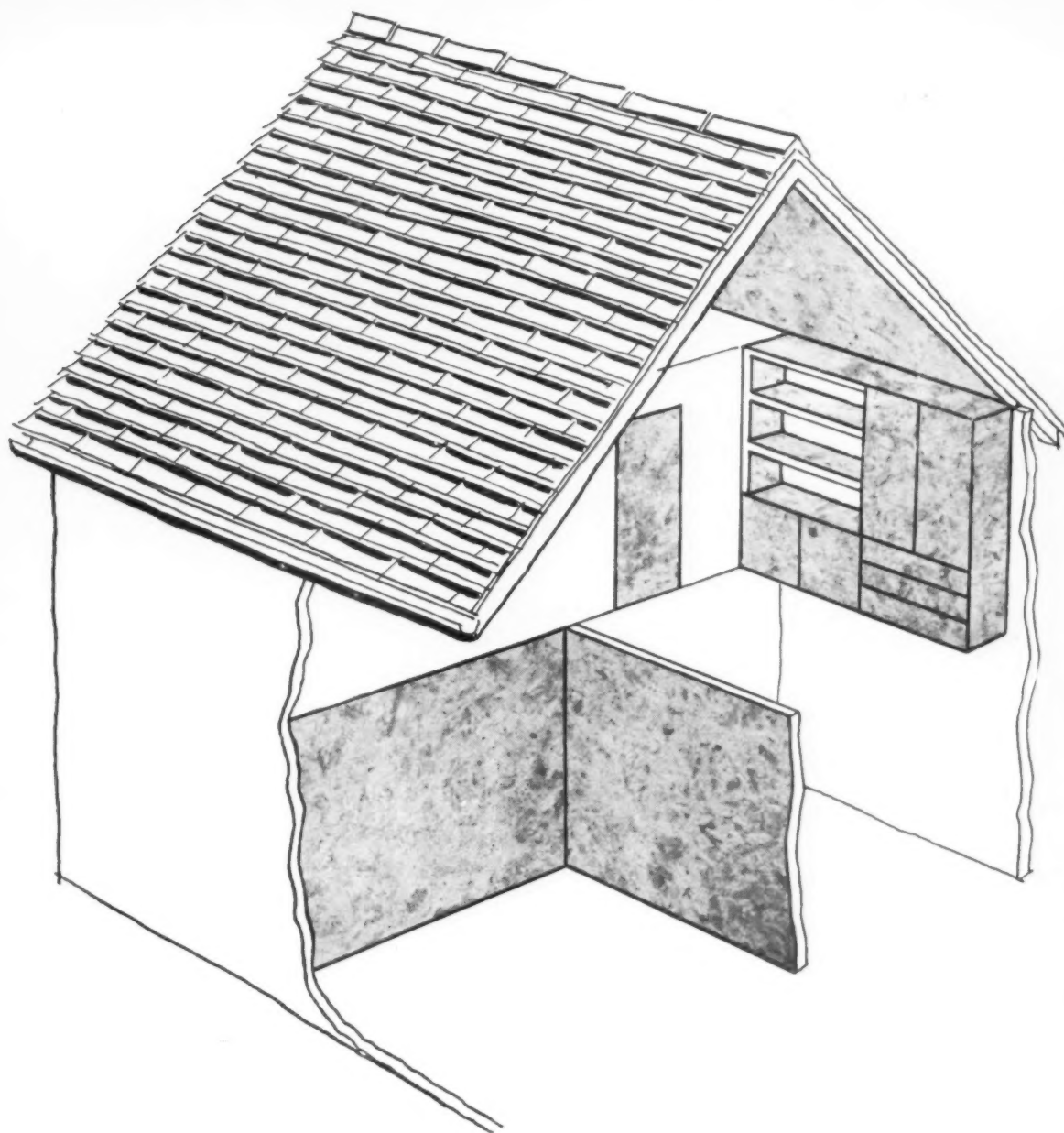
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